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ABSTRACT

This first volume of a two-volume report on the Eleventh World Conference of the International Council for Correspondence Education (ICCE) contains the advance papers presented at the conference. An introduction preceding these papers provides the ICCE president's message and an orientation by the host country, India. The 37 papers are organized into the following five categories: (1) correspondence education in general; (2) adminintrative practices; (3) teaching methods; (4) student counseling; and (5) applied research. Some of the topics addressed by these papers are predictions for the future of correspondence education; accreditation and enrollment concerns; financial concerns; the use of satellites, telecommunications, and computers; effective counseling techniques; and research trends and utilization. The biographies of program participants and guidelines for ICCE chairmen and rapporteurs are appended. (BM)

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international council for correspondence education

Correspondence Education: dynamic and diversified

Edited by Robert B Wentworth

Volume 1 The Advance Papers

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TABLE OF CONTENTS

Theme: Correspondence Education: dynamic and diversified
--through administrative practices
--through teaching methods
--through student counseling
--Through applied research

Introduction **Page**

A message from the ICCE president 7

India - An introduction for visitors (Bakhshish Singh, conference host) 9

... And now a word from the program committee chairman 14

General

Dr. Bőrje Holmberg: The development of correspondence education - an international concern 17

Charles A. Wedemeyer: A decade of co-operation between ICCE and UNESCO: possibilities for the future 25

Renee F. Erdos: Predictions of things to come. What will distance education be like 20 years from now? 30

Dr. Bőrje Holmberg: The critic comments on "Predictions of things to come" 35

Robert B. Wentworth: Games for conferences 37

Dr.Vijay Lakshmi Sharma and Dr. Donald M. Cunningham: Contemplation and expression 33

Administrative practices

Rex E. O. Akpofure: The activities of the Commonwealth Secretariat in correspondence education 39

John F. Phillips: Accreditation of correspondence colleges -- the United Kingdom experience 44

Dr. Doil F. Felts: What should the director of correspondence study do to achieve his objective 49

Robert B. Wentworth: In what new ways can we increase our enrolments? (A brainstorming demonstration) 52

Dr. Edward C. Estabrooke: How to reduce the number of dropouts ... 57

Milton Gussow: The whole amazing process of developing, publishing testing, and revising in-house educational materials 62

Dr. Homer Kempfer: Memories of marketing 71

Kevin C. Smith: Dollars and sense: some practmcal considerations in planning an external studies program 75

Patrick Guiton: Dollars and sense: distance education for 1 million square miles of Western Australia 81

Dr. Arthur W. Chickering: Dollars and sense at Empire State College, State University of New York 85

Dr. Otto Peters: Dollars and sense at the Fernuniversität 92

Bakhshish Singh: Correspondence courses in India. Some problems and future needs 98

Dr. S.C. Goel: Problems and achievements of correspondence education in India 104

Dr. Vijay Lakshmi Sharma: Steps toward more effective correspondence education (in India) 109

Ruddar Datt: Financing correspondence education in India: some relevant questions 113

Dr. Emmanuel Urhobo: How can a developing country achieve its manpower targets? A personal view 118

Susana Buigues de Milanesi: ULSA trains its students "in-company" in 22 countries 124

Dr. Börje Holmberg: The critic comments on "ULSA trains..." 127

Teaching methods

Carol Tribe: The adventure: carrying distance education over 4,000 miles to American Indians 129

Dr. John S. Daniel: Satellites in distance education: Canadian experiments on the Hermes satellite 135

Dr. Klaus Haefner: Using telephone and two-way cable TV networks for distance education 142

Erling Ljoså: Why not a correspondence course for correspondence tutors? 146

Rick Powell: Writing readable correspondence courses – feedback that helps! 149

Janet Jenkins: How to edit teaching materials: a personal view 155

Elias Pereira: How a teacher should respond to a lesson submitted by a student 159

John Båäth and Nils-Ove Mansson: Our computer corrects student papers and writes individual personal letters to each student 167

Student counseling

Dr. David Stewart: Academic support and guidance for individuals in a distance learning system (The Open University) 175

Louise Singer: Student counseling -- what works best? 179

Applied research

Dr. Otto Peters: Panel – Research reports and shared insights: what do we know about our students? 182

Erling Ljoså: What are we doing in research? Some trends in the ICCE research survey 1976 - 1977 184

Lillian H. Wentworth: How to use the library **imaginatively** in developing a correspondence course 190

Appendix

Biographies of program participants 201

Guidelines for ICCE chairmen 211

Guidelines for ICCE rapporteurs 213

THE ICCE PRESIDENT'S PREFACE

Just over 40 years ago in August 1938 ICCE held its First International Conference. In his foreword to the Proceedings of that conference, President R.C. Haight quoted the following paragraph from the pre-conference literature -

"In bringing together leaders in the movement for correspondence instruction and supervised correspondence study from different countries, an opportunity will be afforded for an exchange of experiences and an examination of widely different points of view; for the evaluation of results already achieved and the consideration of unsolved and difficult problems; for the examination of different techniques and a possible standardization of the most approved procedures in the preparation of courses and in administration. In short, an attempt will be made to determine such policies as shall make for the most effective utilization of the correspondence method of instruction."

Forty years later that paragraph is still valid for ICCE's Eleventh World Conference. Yes, there have been changes. Communication is much faster: jet planes speed our mail half-way round the world in a few days and modern technology with audio visual aids of TV, radio, telephone etc., have added new dimensions to Correspondence Education. Nevertheless, the need for correspondence educators to consult with one another, to aid one another's research, and to prove that they are an increasingly vital part of worldwide education, remains.

Programme Committee Chairman, Mr Robert B Wentworth, and his committee, have tried to serve as many needs and interests as they reasonably can in as interesting a way as possible. Thus, no matter whether your speciality is research, teaching, administration, or promotion, you will find plenty to interest you. Whet your appetite first by reading the Table of Contents of this book. There are even more leaders on the programme than there are papers in the book, so if your speciality seems inadequately represented, look for it also in the conference programme. This book of advance papers, the conference programme in New Delhi and the Proceedings (which will be published following the conference) all aim to further important objectives set forth in the ICCE constitution -

"(a) to promote knowledge and improvement of correspondence education throughout the world.
(b) to foster good fellowship and better understanding among correspondence educators of all nations.
(c) to exchange publications, lesson material, and other information respecting the growth and organisation of correspondence education.
(d) to hold conferences, demonstration programmes and training sessions, for members and others interested, from all countries, for the discussion of correspondence education.
(e) to publish the proceedings of the Conferences of the Council."

For a variety of reasons I believe that the Eleventh World Conference will have a flavour all of its own, as you will begin to find when you take the next step and read the advance papers. The conference takes place in a developing country for the first time. Many of the delegates will have travelled further to attend this conference than any previous ICCE conference.

It is with pride that the International Council for Correspondence Education can look back on 40 years of valuable activity and at the same time look forward to many more years as a world organisation with a significant role in Correspondence Education.

David M Young
The Rapid Results College
London

INDIA An introduction for visitors

Bakhshish Singh,
Punjabi University
(India)

India, an ancient land with over 5,000 years of recorded history, may seem to outsiders a wonderland of colourful princes, snake charmers, bearded peasants and teeming millions steeped in poverty. It is only when they visit this vast country that they realize the immense change that India has undergone since she attained freedom in 1947.

We have managed to stand on our feet and set ourselves up as a sovereign democratic republic. The elections to the Parliament and the state assemblies are held on the basis of universal adult franchise. India is the largest democracy in the world.... and democracy has survived in India despite numerous strains and occasional social and regional tensions.

This is our land

India is the second most populous country in the world with a population of about 600 million and an area of about 270,000 square miles. In area it is the seventh largest country; it is about the size of Europe, excluding Russia. Stretching over 2,000 miles from north to south and 1,700 miles from east to west, it has land frontiers of over 8,200 miles with Pakistan, Russia, China, Bangladesh, and Burma. The coast line is spread over 3,500 miles.

Although generally regarded as a tropical region, India lies entirely north of the Equator. The northern half of the country (where Delhi is located) is actually in the temperate zone.

Geographically, India can be divided into the mountain regions of the north and northwest; the great northern and central plains with the Indus, Ganges, and Brahmputra rivers; and the great plateau of the south or peninsula area.

Thus India presents a varied and splendid landscape from the highest mountains in the world (the Himalayas) to the world's wettest region in the northeast, where tea plantations are located. We also have some excellent beaches at Goa, Kerala, and Orissa.

Flowering trees in various seasons lend colour and exquisite beauty to the towns, roads, and gardens. Over 1200 distinct species of beautiful birds provide a pleasing symphony of their own. The majestic peacock is India's national bird.

India is also known for its abundant wild life -- tigers, lions, elephants, bears, and rhinoceros. We have some good game preserves, wild life sanctuaries, and national parks.

The climate varies

In a vast country like India with its varied terrain, varied climates are inevitable. We have the snowclad regions, the moderate climate areas, the hot regions as well as regions where one can experience severe cold in winter and extreme heat in the summer. We have five distinct seasons: summer, monsoon, autumn, winter, spring.

The extremes of climate of the Indian sub-continent are factors in shaping the Indian character and attitude toward life. We find extremes of rigorous asceticism and also total abandon to luxury!

The people - unity in diversity

For 500 years people from different lands have been infiltrating into India and staying on permanently.. Thus Indians are a mixture of several strains: Dravidian, Indo-Aryan, Mongol, Turkish, Persian.

The Indian people in 22 states and 9 union territories speak different dialects and languages. We have 845 dialects and 225 languages still prevalent in India! However, only 17 languages have been recognized by the Government and Hindi is our national language. English still occupies an important place in our educational and administrative system and educated people all over the country speak and write English.

In spite of variations in languages, costumes, religious beliefs, social customs, India presents a unity in diversity.

Village life

The chief occupation in India is agriculture; over 75% of the people live in villages. It is primarily in the villages that one can still see the old Indian culture, traditions, and customs. The joint family and the caste still constitute the basic social system in the villages, though educated people are now slowly discarding these age-old traditions.

Life in villages is hard, but in some states, particularly in Punjab, the villagers are now prosperous. They use the latest farm machines and have easy access to the modern amenities of life.

The Punjab is the most prosperous state in India; it supplies wheat (which once came from America or Russia) to the rest of the country.

City life and industry

India has large and cosmopolitan cities: Bombay, the Gateway of India; Delhi, the capital city; Chandigarh, the well-planned city designed by Le Corbusier; Calcutta, the largest city in India; Madras, Hyderabad, Ahmedabad, Bangalore, Kanpur and Amritsar, the city of the "Golden Temple".

One can also see the remnants of princely India – the grandeur of the palaces and gardens of the erstwhile Maharajas. Some of these palaces have now been converted into luxury hotels where the tourists can taste the grandeur of the princely times.

This merging of past and present in the villages and cities of India is one of the attractions that India holds for visitors.

Industry has available the world's largest deposits of coal and the third largest deposits of iron ore besides abundant quanties of petroleum, mica, manganese, uranium, and rare earths.

The major industries are cotton textiles, jute, iron and steel, sugar, tea, oil seeds, and vegetable ghee. The minor industries include lacquer work, papier mache, furniture, wood and ivory carving, metal work, carpet and shawl weaving.

The religious life of India

From time immemorial, India has been known for its rich spiritual and religious heritage. It is the birthplace of several religions and the land of great prophets and saints.

The major religions of India are Hinduism, Buddhism, Islam, Jainism, Sikhism, and Christianity. For the majority of the people, religion is confined more or less to rituals and ceremonies. But there are true seekers of spiritual bliss who endeavor to study and understand the teachings of the religion they profess.

Punjabi University, Patiala was the first Indian university to initiate a full-fledged department of religious studies for the analysis of five major religions.

Tourists can get a glimpse of the religious life of Indians by visiting some of their places of pilgrimage like the famous Hindu temples of Banaras, Madurai and Mahabalipuram; the great mosques of the Muslims; and the Golden Temple and other religious places of the Sikhs. India has the oldest Christian church in the world except the one in ancient Palestine. It is the Syrian Church in Kerala, founded in AD 52 by St. Thomas.

Although there has been a distinct decline in religious faith, the spirituality of India seems to have made a great impression on the Western observor. Perhaps that explains why swamis, mystics, and yoga practitioners are gaining popularity in Europe and America. We can see clear manifestations of this influence in the Hare Krishna movement and the American converts to Sikhism.

An amusing sidelight of Indian belief in religion is the practice of astrology and palmistry. Though there may be some sound astrologers and palmists, the ones sitting on pavements in cities are quacks who exploit innocent people by painting a rosy picture of their future or frighten them with concocted stories of some ill luck to come.

Indian culture -- dance, music, painting

India provides a rich feast of tribal dances, folk dances, and classical dances. The beautiful tradition of Indian dance, which was once confined to *devdasis* (women dancers) in the temples, has now become popular with the people. We have frequent public performances of classical dances as part of our cultural programmes.

The classical Indian dance is highly stylised and uses a language of intricate and meaningful gestures known as *mudras* . Some of the Indian dancers, like Uday Shankar, are world famous.

Village life all over India vibrates with natural gaiety and abandon expressed in popular folk dances. Festivals are another remarkable aspect of Indian culture; they are as varied and colourful as the people. Most of the festivals have religious or seasonal significance. *Diwali,* the festival of lights, is the most popular national festival celebrated throughout India; it has illuminations and fireworks.

Similarly, the classical tradition of music, once the preserve of the rich, is now accessible to a much larger audience, thanks to the radio. Indian music is distinctive and different from Western music and yet within the country it offers unparalleled variety. Western music may be based on harmony and counterpoint; Indian music confines itself to melody and rhythm.

Indian music is divided into a number of *ragas* each of which has a special name and is in a different scale and mode. Then we have some variations of these ragas called *raginis.* Each hour of the day and night and season of the year have their appropriate ragas and raginis. Classical vocal music of India may be beyond the comprehension of Westerners because of the language barrier, but Indian instrumental classical music can certainly hold all lovers of music spellbound..... But even in India classical music doesn't attract many admirers.. The most popular music is the "film music" which is a blend of Indian and Western conventions.

India has rich traditions of architecture, sculpture, and painting. The Hindu temples, Buddhist shrines and monasteries, the caves of Ajanta and Ellora, the Moslem mosques, and the Gurdwaras (places of worship of the Sikhs) are some of the finest examples of these arts.

The art of the world, especially the art of the Eastern world, owes a great debt to Indian art. But most of the Indian traditions in these arts have now almost completely disappeared. Most of the painters, for example, have developed personal or individual styles and are greatly influenced by Western artists. As a result, there is not much of Indian painting in India, but there are plenty of good paintings.

Education... commendable efforts

Although India has made commendable efforts over the past 30 years, illiteracy is still the most baffling educational problem we have to tackle. Sixty per cent of the population (age 10 or over) is still illiterate. Gains in literacy have been offset by the population explosion.

The Indian Constitution envisages free and compulsory schooling for all children up to the age of 14, but very few states have been able to meet the target. The number of schools has increased substantially in recent years at the elementary, secondary, college and university levels, but still we have not been able to meet the demand.

The Government has, therefore, decided to lay more stress on non-formal education such as correspondence courses. Correspondence courses, as you will learn in at least two other sessions of this conference, have an important role to play in the future expansion and streamlining of Indian education.

The conference city: Delhi

The City of Delhi is the capital of India and a city with an immense past. Legends say that the Pandovas, heroes of the epic Mahabharata, founded the city in 1200 BC and named it Indraprastha. Many dynasties of kings have ruled at this city. The change of masters sometimes brought devastation, but every time the city rose like a Phoenix from its ashes. Some ruins and remnants of the medieval times can still be seen along the banks of the river Yamuna --forts, palaces, shrines, and gateways built by dynasty after dynasty.

There are today two Delhis -- Old Delhi and New Delhi -- a stimulating juxtaposition of the old and the new. Old Delhi is the 17th century walled city of Shahjahanabad, built by the Mughal emperor, Shahjahan. You can still see the maze of narrow lanes, alleys, and crowded bazaars and the magnificent Red Fort with its sandstone ramparts, and the Jama Masjid with its marble domes.

New Delhi, the heart of modern India, comprises the beautiful imperial complex built by Lutyens during the British regime. Ashoka Hotel is one of the many luxury hotels in New Delhi. There are some very impressive buildings such as the Secretariat blocks, the President's House, the Parliament House, a few skyscrapers, and other imposing buildings housing government offices.

Connaught Place is the most fashionable shopping complex in New Delhi. There are beautiful rows of trees lining the wide boulevards, shaded forest glades, and a few gardens and parks.

Welcome to India!

And now a word from the program committee chairman

What happened? If you haven't noticed it already, you will very soon.

The 11th ICCE conference program is "different"; this book of advance papers is "different" also.

There are at least familiar faces, but usually in new roles. There are some new men and women who bring us new messages. Most of the leaders come from three countries, but we **didn't** plan it that way. In fact, we tried very hard to get people from as many other countries as possible before selecting leaders from the three countries.

Like our theme, our program is dynamic and diversified. Some of the evidence we now call to your attention:

--**The emphasis is on communicating** both ideas and information, on challenging thought, on providing techniques which others can use "as is" or in modified form. It is possible to express just about anything in relatively simple terms and still preserve intellectual respectability. The relatively simple terms are **not** for members using English as a second language: they are for **all of us.** Far better to take pride in the fact that everyone can understand than to boast that "only a few will really understand what I'm talking about".

--**A variety of techniques** have been included in the conference program. Formal lectures and panel discussions (each followed by questions and comments) under effective leadership are admirable devices. But these are not the only ways, nor are they always the best ways in any given situation. Recognizing this, we have retained the best of the old procedures and added a variety of new ones. For example, welcome to India orientation, dialogue sessions, games for conferences, academic gaming, role-playing, Linguaphone demonstration, something about satellites, selected educational films with commentary, a demonstration on "how to edit", practical problems sessions, a simulated computer demonstration, a news round-up from around the world, problem-solving sessions using sub-groups, a brainstorming session, and predictions of things to come.

You may or may not welcome some of the "new" techniques. But usually you have a choice of three sessions at any given time. And surely you, as an educator and enlightened person, will want to experience a new event before making a judgement about it. An idea or a new technique is entitled to "fair trial" or a "day in court". Furthermore, an idea which is new to you has often been used successfully somewhere else.

The initial responsibility for making a program interesting, exciting and intellectually stimulating falls on the program committee. Another part of the responsibility falls on the designated program participants (not all "speakers" in the usual sense of the word) who somehow found it possible to (a) produce a worthwhile advance paper and (b) find the time and money to journey to India. We owe much to all these participants.

But the final responsibility in this working conference is on you, the individual dellegate. If you volunteered to serve as a chairman, a rapporteur, a committee member or in some similar capacity, you also are making a special contribution. But just being in India, asking questions, making comments, is part of making a conference come alive.

A few words of explanation about the book you are now reading may be appropriate. The authors of the advance papers and the program participants should be exactly the same people. But it never comes out even! Some authors were extremely diligent in fulfilling their promises, others negotiated new deadlines and lived up to them, but a few -- well, it's hard to say what *did* happen!

Editing this book of advance papers was not the simple task it might seem. Editing begins long before the paper is written. There's more to it than just saying "please choose one of these topics and submit a paper". The editor should indicate to the writer what he (the editor) has in mind, how the paper under discussion might fit into the total program, how a topic might be defined and developed, what techniques of presentation might be used, some inevitable questions which might be answered....and so on. The intent is not to confine a writer to an arbitrary pattern, but to stimulate the writer's thinking. The competent writer is thus encouraged to submit a "better" paper, not just an adaquate one. Judge the results for yourself!

In evaluating a manuscript, the editor must decide (among other things) whether it will be clear to all readers. Often it may not be completely so. Words, phrases, idioms common to some countries or regions are not always common to all. Should the work, phrase or idiom be changed, should it be interpreted, or should the editor consult with the author? Considering time and distance, the answer varies. But we have tried hard to maintain the flavor and the accuracy of the original.

A few words may baffle new members and prospective members even so. We might as well tell you right now that (as used in this book) correspondence education, distance education, external studies, home study, non-formal study, and sometimes independent study mean essentially the same thing!

We feel kindly toward all those who helped with the program in whatever way. But we are still trying to make it difficult for a few people as yet undesignated - the next program committee. Can they improve on the 1978 conference? Perhaps, but they'll need a first class working relationship with the next ICCE president as we have had with the present one. We know when we are fortunate!

Robert B Wentworth (USA)

The other members of the program committee (in alphabetical order)

Gunnar Granholm (Sweden)
Peter Kinyanjui (Kenya)
Arlene Lynch (Canada)
Gabrielle Rousseau (France)
Bakhshish Singh (India)
Kevin C Smith (Australia)

The development of correspondence education -- an international concern The Knute O. Broady lecture

Dr. Börje Holmberg
(Sweden) at Fernuniversität
(West Germany)

Who was Knute O. Broady? He was a distinguished American, a brilliant but quiet pioneer in correspondence education, a past president of ICCE and its only honorary president. He died on November 22, 1974.

This year (1978), for the second time at an ICCE world conference, we have a Knute O. Broady lecture. In giving the first Broady lecture in 1975, his good friend Dr. Fred Harvey Harrington, Ford Foundation, spoke in part as follows:

"Knute began with Nebraska, a geographically large, small population state. Eventually his courses had students in all 50 states, and in nearly twice as many foreign countries.

"Broady also worked in other fields, as in organizing Nebraska's magnificent Center for Continuing Education (and he was good at raising money, from the Carnegie and Kellogg Foundations, the private citizens and state government of Nebraska, and the federal government). On the international front, he worked in Jamaica, Turkey and Austria, worked with UNESCO, and with ICCE, to which he was devoted.

"Knute's career covered the years when the correspondence and distance education specialists were struggling for support and recognition. What he did certainly helped to usher in the present age, in which the field has come to triumph. For that triumph, and for the future prospects of correspondence education, we must thank a few individuals, of whom Knute Broady is one. He must not be forgotton."

For the face-to-face Broady lecture, Dr. Borje Holmberg will discuss and comment informally upon the themes described in the paper printed below. "I shall no doubt have (in November 1978) news aspects to add and shall -- I trust -- know more than today, for instance, about the relevance of the theory I have outlined," Dr. Holmberg said in submitting his paper.

In this paper I use the term *correspondence study* as synonymous with what I usually call *distance study.*[1] Here I follow the terminology of the ICCE Inquiry into the correspondence educating processes, This inquiry was made and reported on by Riply Sims for UNESCO in 1977.

Key statements about correspondence study

The concepts of Sims' report seem essential to me. As Sims' approach agrees with my own position, I allow myself to quote the following conceptual statements from his report as identifying my starting points:[2]

(1) However else it may be defined, education involves processes by means of which the individual learner acquires meanings, significances, habits, and attitudes as the outcomes of having experienced the processes. (p. 42)

(2)...only an individual human being can learn.... Learning, in short, is an individual matter. (p.13)

(3)... in whatever society, for whatever purpose, by whatever means, under whatever ideology, the essential objective in educating processes is learning by an individual learner.... the methodologies or strategies employed are only incidental to this end. (p. 18)

(4) Communication is the essential element in all educating processes, and both correspondence and conventional educating processes employ, on an increasing scale, multimediated techniques of communication... (p. 4)

(5) The unique and distinguishing feature in the correspondence educating processes is that the learner is at a distance from the teacher for much, most, or even all of the time during the teaching-learning processes. (p. 4)

The originator of these conceptual statements is Ripley Sims. The quotations are from a review draft of his report which is not available in print as this is written.

To these statements I should like to add that in my view

---teaching must be regarded as an activity encouraging and facilitating learning and that

---correspondence education as a whole is a learning-centred system. [3]

The limits of what is universal in correspondence study

The statements made so far may not be universally acceptable, but there is -- as far as I can see -- nothing national or regional about them. They probably stand the same chance everywhere in the world of being accepted or, possibly, rejected. In other words, they refer to correspondence study as an international concern and are presented for an international discussion.

But we need not go far in a presentation of correspondence study before we come up against national or cultural differences of a kind that make international generalmsations very difficult. This applies not only to technical media. (For instance, the use of TV for disseminating information or the telephone as a means of two-way communication) where the developing nations are as a rule at a disadvantage, but often enough to basic elements of the correspondence study processes.

To me, communication by means of non-personal contacts must be an integral part of correspondence study. Two-way communication at a distance is seen as a necessity, whether it is brought about in writing. (the simplest form is the preparation, submission, correction, and commenting on students assignments) or by technical arrangements. There are sophisticated varieties inclusive of those where students initiate communication. In any case, it is correct to say about the type of correspondence study I have in mind that *interaction* between the learner and the teaching organisation is a *sine qua non* and that "the interactive ... phase of teaching is conducted through print, mechanical, or electronic devices."[4]

This, however, does **not** apply to, for instance, the East-German "Fernstudium" (literally translated = distance study, a term used in West Germany for correspondence study inclusive of two-way communication). The East-German Fernstudium provides, apart from study material, elements of communication by frequent group meetings (consultations, seminars), but makes no provision for the submission of students' papers or other forms of non-personal two-way communication.

This difference no doubt strikes many as questionable. There is good reason to query whether correspondence study is a proper designation for the EastGerman type of distance (?) study. Naturally our perspectives are influenced by our own backgrounds and so we may accept other practices which colleagues in some other cultures find questionable. Thus, for instance, how does the insistence on individual learning articulated above go along with the practice in some institutions to send materials at fixed intervals irrespective of the needs of the individual students or even to allocate strictly limited periods for the study of certain course elements and refuse to deal with the students' papers concerned before or after these periods?

There are examples galore of artificial limitations of students' freedom to select their courses, to plan and run their studies. We may well universally or almost universally - talk of the correspondence student as a mature person whose autonomy we wish to support and increase, but for various reasons this mature student is far from always allowed to make his/her own selection of courses and course units or to decide if a supplementary residential course is worth his/her while or not. It is a fact that correspondence students, particularly those in official university systems, are often submitted to regulations concerning study periods and study methods that far exceed the necessity imposed by examination regulations or similar, possibly external influences.[5]

To what extent can all the various possibilities inherent in correspondence study be applied in different cultural settings? The general educational and social traditions and attitudes vary and are very powerful in official systems in shaping study regulations, probably even more so than tangible educational needs. One reason for this is that parallelism with conventional universities and schools is considered important and may even be vital for academic recognition and prestige.

Divergencies of the type just mentioned are international concerns just as much as the principles referred to at the beginning of this paper are likely to be acceptable in the various cultural settings where correspondence study occurs.

But change must needs largely be based on national or regional circumstances and must in any case be decided on nationally or locally. It is certainly worth our while scrutinising the particular systems we are engaged in with a view to tracing irrational restrictions and procedures imposed by national or cultural traditions. It may not always be possible to affect a change, however, at least not abruptly. Bridging the gaps between different cultures and traditions by information and exchange of views is again an international concern.

The objectives attainable by correspondence study

By now it is well known that cognitive objectives can be attained at least equally well by means of correspondence study as by conventional forms of learning.[6] Some psychomotor objectives, i.e. skills like surgery or the capacity to handle dangerous chemicals, machinery etc. do not lend themselves to correspondence study, whereas other skills do (drawing and typewriting for instance). There is, as a rule, little discussion about these types of objectives in relation to correspondence education. The affective domain,[7] i.e. the types of objectives concerned with attitudes and emotions, has attracted more attention as a problem area. It is often felt that socialisation for life and work in society, in industry, public institutions, and associations cannot be attained exclusively by correspondence study. I am inclined to agree myself.

The controversial question is what practical measures the recognition of the potentials of correspondence education (as described here in relation to types of study objectives) should lead to. If the correspondence student is an adult with experience of society, work situations and relations between human beings generally (true of most adults), then general socialisation is provided *outside* the correspondence study situation. This is relevent internationally as the shortcomings of correpondence study in the affective domain are in many parts of the world - explicitly or implicitly - considered a serious defect and a reason to add face-to-face elements to correspondence courses. Such face-to-face elements may be useful - even very useful and valuable as improving completion rates provided they do not interfere negatively with individual learning.[8] But if - as occurs in some countries and in some types of study - they are to be made compulsory, then it is hardly convincing to refer to the requirements of socialisation since it is acquired elsewhere. Specific academic socialisation - the methods for unbiased search for truth, the use and recognition of sources of knowledge etc. - would seem to be adequately catered for by pure correspondence study.[9] This, on the other hand, is evidently not the case when the capacity to co-operate in groups is an important study goal.

Here again we come up against opposite views leading to divergent measures firmly based in regional, national or group convictions. It is an important task to find out to what extent such convictions are rational or largely based on prejudice. In my view, combinations of correspondence study and face-to-face sessions should - like selections of media - be based on the requirements (also wishes) of students and the objectives aimed at. No one suggests that surgeons or air pilots should be trained exclusively by correspondence study. The types of psychomotor objectives concerned prevent this. An area both for unbiased consideration and for international comparison is, on the other hand, the planning of measures to attain affective objectives.[10]

Correspondence study as a type of simulated guided conversation

In an international context it is natural to search for the common denominator of international correspondence education and to try to specify what makes correspondence study effective in the *cognitive, psychomotor* and *affective domains.* What we are after is an explanation of what correspondence study really is and what it is good for. Like others, I have been considering this. As a consequence of this thinking, I have developed a theory of simulated guided conversation as the true character of a correspondence study, which includes both simulated communication through the wording of the courses and real communication in writing, on the telephone, on tape, or in other forms. This theory does not contradict the theoretical approaches of Delling,[11] Graff,[12] Moore,[13] or Peters[14], but approaches correspondence study from entirely different points of view.

- that the atmosphere, language and habits that are typical of friendly conversation promote the feelings of personal relationship referred to
- that information given and received in conversation is comparatively easy to understand
- that in guided conversations the student finds either that he agrees with (accepts) or, in any case, understands the teacher's presentation and that this facilitates learning
- that this concept of guided conversation can be and has been adapted to correspondence study.

The following characteristics are regarded as typical of the guided conversation that is adaptable to correspondence study.

- easily intelligible, fairly colloquial language; in writing the style of informal correspondence

My theory is based on the understanding

- that feelings of personal relationship between learner and teacher promote motivation and study pleasure
- that study motivation and intellectual pleasure improve the possibilities of attaining the learning objectives.

- suggestions for consideration and judgement (given in courses as a kind of simulated communication and in tutor's comments on papers submitted)
- exchange of opinions, questions and answers, requests for information about positions taken; constructive criticism, counselling, encouragement (the real two-way communication initiated by assignments or at either tutors' or student's initiative.)
- the use of the personal pronouns I, me, we, us, you and the corresponding possessive pronouns.

The assumption that the approach of guided conversation is more effective than impersonal presentations can be empirically tested on the basis of a series of hypotheses derived from the theory[15]. What is important in the present context is the attempted *explanation of the basic character of correspondence study as a mediated form of guided conversation.* I hope this approach will contribute to fruitful exchanges of views and experiences among correspondence educators irrespective of national and cultural boundaries.

Correspondence study as an innovation in education

Although organised correspondence study has existed for about a hundred years, it is still something of a novelty in certain contexts. This is generally true of European universities and government-supported schools. On the other hand, the British Open University, the West German Fernuniversität, the Spanish Universidad Nacional de Education a Distancia, and the Israeli Everyman's University are all newcomers as correspondence schools.

Certain procedures of correspondence study would seem to be fairly generally accepted as normal by private correspondence schools catering to individual students' needs and wishes. Here, maybe, the methods and proceedures have become so accepted as to be almost sacrosanct. Where this is the case, we may have to defend correspondence study from a conservatism which is adverse to any type of change, even if it may lead to improvement.

Where correspondence study is either new or dependent on organizations whose prime interest is not correspondence education (most government-supported schools), it is often felt to be an innovation. Innovations usually threaten the system (or parts of the system) to some extent; they cause concern and create conflict. Conflict results in opposition on the part of the defenders of the old system. The more they feel threatened and the more something new makes them insecure, the harsher the opposition. In our case, the defenders of the old system may be spokesmen of the traditional campus university who may reject the unstructured time typical of correspondence study and insist on its opposite predetermined periods for the study of each course or each set of course units. Insistence not only on strict time plans, but also on face-to-face elements as a compulsory component of study, irrespective of subject and objectives, is also the defence of a traditional system against innovation.

In discussions of innovations, reference is often made to three stages: unfreezing, moving, refreezing.[16] Whereas self-sufficient, established correspondence study would seem to have reached the stage of refreezing, correspondence study in some official educational systems is attempting to complete the unfreezing - or has only just done so - and is on the move. Strategies for innovative work have been developed.[17]

It may be worth correspondence educators' while to discover at which stage of innovation their work is located and to act accordingly in their attempts to promote correspondence study with their particular cultural setting.

International correspondence study and ICCE

The examples given above of correspondence education and its problems as international concerns will, although only selecting a few aspects that seem important to me, have sufficed to show that all correspondence educators have much in common even though there are highly divergent lines of thought among them. *It is of vital importance that these lines of thought, theories, experiences and plans are illuminated by fruitful discussions and comparisons with due attention paid to different cultural settings.*

For this purpose there is one truly international forum, the ICCE. Its conferences, its Newsletter, its work with other international bodies like Unesco, and the informal contacts it paves the way for have proved immensely valuable for colleagues all over the world. The conference proceedings and pre-conference books published bear witness to the importance of ICCE for international development and co-operation in our field and for friendship among colleagues in various parts of the world.

I wish to finish by paying homage to ICCE and to its late former president and honorary president, whose name is attached to this first paper submitted to the 11th ICCE conference: Knute O. Broady, a deeply respected personality whom many of us remember as a good friend and colleague.

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4. Moore, Michael, Cognitive style and telemathic (distance) teaching. ICCE Newsletter vol. 5, # 4 (1975) p. 3.

5. Cf. in the pre-conference book of the 10th ICCE conference "The System of Distance Education" (Malmo: Hermods 1975), the contribution of Kevin Smith (pp. 161-169) with that of Rudolf Manfred Delling (pp. 58-59)

6. Cf. Granholm, Gunnar, Classroom Teaching or Home Study - a Summary of Research on Relative Efficiency, Epistolodidaktika 1971: 2 pp. 9-14, and Childs, G.B. in the ICCE research report, 8th ICCE Proceedings pp. 55-57, Paris: ICCE 1969.

7. The terminology used for the characterisation of various types of objectives is that of Bloom, B.S., Kratwohl, D.R. et al., Taxonomy of educational objectives I and II. New York: McKay 1956 and 1964 respectively.

8. On the basis of some empirical evidence I have developed my views on the combinations of distance and face-to-face study in a German paper, Die Ergänzung des Fernstudiums durch Nahstudium, ZIFF-Papiere Nr. 15, Hagen: Fernuniversität 1977.

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13. Moore, M.G. Towards a theory of independent learning and teaching, *Journal of Higher Education* XLIV (1973) pp. 661-679, and A model of independent study. *Epistolodidaktika* 1977: 1 pp. 6-40

14. Peters. Otto, Die didaktische Struktur des Fernunterrichts. Untersuchungen zu einer industrialisierten Form des Lehrens und Lernens. Tübinger Beiträge zum fernstudium Vol. 7 Weinheim: und Beltz 1973. Cf. also Peters, O., Theoretical aspects of correspondence instruction In: MacKenzie, O., Christensen, E.L.,The changing world of correspondence study University Park: Pennsylvania State University Press 1971.

15. Information on the investigation of this theory, a research project of mine, is available in German and can be requested from my office, Fernuniversität, Zentrales Institut für Fernstudienforschung, Postfach 940, D-5800 Hagen, Federal Republic of Germany.

16. These stage descriptions apparently emanate from Kurt Lewin. My source of information is an official Swedish report about innovation in higher education, Östergren, B. & Berg, Börje Utbildningsplanering för förnyelse: Innovationer och innovations-processer: högre utbildning pp. 156-157. Stockholm: UHÄ 1977

17. See, for instance, Bennis, W.G., Benne, K.D., Chin, R. & Corey, K.E., The planning of change. New York: Holt, Rinehart & Winston 1976; Huberman, A.M., Understanding change in education: an introduction. Paris: Unesco IBE 1973, and for those who read Swedish the study referred to in footnote 16, which to some extent builds on Lewin's field theory.

A Decade of Cooperation between ICCE and UNESCO: possibilities for the Future

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The ICCE - UNESCO relationship is now one decade old. It is appropriate to review that relationship and try to lay a basis for future collaboration. The paper reviews the kinds of collaboration in the past, and raises questions about UNESCO - ICCE activities in the future, according to the purposes of both organizations, their priorities, and the new sense of urgency regarding learning for survival and development.

The Eleventh World Conference of the ICCE marks nearly a decade during which ICCE has been a nongovernmental organization affiliated with UNESCO. It is appropriate that we and UNESCO review the association which began to function with the Eighth ICCE World Conference at UNESCO-House, Paris, in 1969, although the preparations for our relationship go back at least as far as 1965.

ICCE is a Category B NGO (non-government organization) affiliate with UNESCO. The relationship is hence more than informational, and is in several respects cooperative and even collaborational. The official relationship is carried on by the ICCE president and executive committee and a designated officer of UNESCO.

So far, cooperation and collaboration have been primarily on the basis of proposals from ICCE to UNESCO. State of the art publications(such as Renée Erdos' *Teaching by Correspondence*, published by UNESCO in 1967) and major research (such as Ripley Sims' *An Inquiry into Correspondence Educating Processes*. supported in part by a UNESCO grant and completed in 1977) were first proposed to UNESCO by ICCE. UNESCO evaluates such proposals, and if approved, budgets them at some level of support.

But there have been other activities linking these organizations: the provision by UNESCO of travel and subsistence funds, enabling developing nation educators and ICCE members to attend ICCE World Conferences; the use of UNESCO-House facilities in Paris for the 1969 conference; the exchange of viewpoints on worldwide educational problems and policies; the representation of ICCE at certain UNESCO meetings in Paris and elsewhere; the cooperation of ICCE and UNESCO in regional and international workshops and seminars; the exchange of materials between ICCE and UNESCO (including the purchase, by UNESCO, of ICCE *Proceedings* and *Newsletters* for UNESCO libraries and distribution).

The cooperative activities of the past decade have no doubt influenced both ICCE and UNESCO. The purposes and functions of these organizations overlap and reinforce each other - in our joint concern for the improvement of educational opportunity worldwide, in our desires for equality of access to learning for all people, in our commitment to the improvement of the materials and methods of instruction - all in a framework recognizing the rights of all people to learn.

There should be, in our separate and joint activities, a new sense of urgency about learning. In North America and Europe, and spreading into other continents, there is growing conviction that everyone has a need ,for and a right to, learning throughout life (Venables, 1976). The idea of "schooling", the discrete place-time education of children and youth, is being replaced by the concept of "lifelong learning" unhampered by place-time barriers, motivated by the changing and maturing needs of learners, and under-taken by responsible and self-directing adults. This is the fastest growing segment of education in many societies, and seems likely to become the largest in the future (Wedemeyer, 1975; Harrington, 1977).

We seem to be on the threshold of a "learning society" in which learning is regarded as essential not only for the survival of man, but also as the only route to social and individual maturation (Bronowski, 1974). In a complex, interdependent, and increasingly overcrowded world rapidly using up its natural resources suffering from unequal distribution of food and energy, from pollution, and from immature civilizing processes, it is increasingly recognized that man's capacity to learn has been the least appreciated and least developed human resource. Continuing lifelong learning is thus the key to personal development and adaptation to the social charges wrought by new knowledge and technology. Technology, which requires more independent and self-directed learning, can at the same time improve learning opportunity and access (Wedemeyer, 1976).

The multiple, interrelated problems of modern society (health, energy, pollution, peaceful co-existence-to mention only four) are likely to be resolved only if people are able during their lives to accomplish new learning "sets" which will change basic attitudes, values and behaviors.

The educational services of the future must serve the full range of learners in society. Yet it must also concern itself with the residual effects of the less effective educational systems of the past, which live on and are a part of every social need and problem. Not all children and youth received an adequate education in the past, and as they grew into adulthood, they carried the learning deficits of their school years with them. Since World War II, these deficits have become severe handicaps to steady employment, job satisfaction, successful parenthood and effective participation in the affairs of a rapidly changing society, with often disastrous effects for the individual and his/her family, and the community.

Supplementary education services that are mere extensions of regular schooling, at fixed times and places, deny access and opportunity to those who most need to overcome learning deficits, and perpetuate traditional barriers to continuing education for self and community development. Delivery of educational services to the home by various communications media could overcome some of these problems and improve the lives of the whole range of citizens: pre-schoolers, elementary and secondary pupils, employed and home-bound adults, the institutionalized and the elderly. (Note 1)

In view of the decade of cooperation between ICCE and UNESCO, and of the increasing importance of learning for development and survival, are the members of ICCE, and the representatives of UNESCO, satisfied with the relationship? It is now appropriate to ask what each of these organizations can do to further its special purposes, and even more particularly, to advance our overlapping concerns, through an enhanced program of mutual collaboration?

If so, let me place these questions before the Honorable Amadou-Mahtar M'Bow, Director-General of UNESCO.

1. Is UNESCO satisfied with range and depth of cooperation with ICCE in the past decade?

2. How can ICCE be brought further into UNESCO'S work towards a "learning society"?

3. How can ICCE obtain better linkages with UNESCO officials, specialists, and other NGO's with complementary concerns?

4. How can a more useful dialogue be developed between ICCE and the various bureaus of UNESCO (methods and techniques, adult education, communications amd media, etc.)? These bureaus need the assistance of ICCE if they are to achieve their objectives-the real reason for establishing NGO's in the first place.

5. Keep in mind that ICCE is the only world organization that has for the past forty years provided a professional sharing and working structure for specialists concerned with educational opportunity and access beyond conventional schooling; that its members are small in number and impecunious; that many educators in developing countries cannot afford even to pay the modest dues of the organization; that all of the work of ICCE is done by volunteers without remuneration and frequently without the reimbursement of expenses; that education beyond conventional schooling has never enjoyed that gentle rain of subsidy which has been given to schooling; that the consumers of our non-conventional programs have been persons excluded from conventional opportunities to learn, and hence compose the groups most suffering from learning deficits and most in need of opportunity to learn; that almost alone and unaided the members of ICCE have created effective and efficient systems for learning anywhere there are learners with needs, regardless of time, place, geography, socio-economic conditions, elitism and local or even cultural restrictions; that international and intercultural programs are more expensive for many reasons than others; that an extraordinary reservoir of talent,

competence and experience exists within the tenuous bonds of ICCE, ready and willing to share, to work, and to advance learning opportunity and access for all. In view of the foregoing, in what ways can UNESCO assist ICCE in strengthening itself, in creating a secretariat, in responding even more vigorously to the worldwide requests for technical-professional aid which, as an organization, we cannot now respond to?

6. During the next decade, in what activities from the following list will UNESCO need the help of ICCE for priority development and promotion, regionally or worldwide?

a. informational publications

b. research publications

c. training, demonstration, workshop teams

d. attendance at ICCE conferences, workshops

e. attendance at UNSECO planning sessions, conferences, workshops

f. exchange of information, materials

g. programs to improve educational opportunity, access

h. training of teachers, administrators, specialists in non-traditional education

i. development of non-traditional institutions

j. media and technology in non-traditional teaching and learning

k. learning theory and practice not based upon schooling

l. new models for learning beyond the classroom

m. intercultural learning

n. lifelong learning

Perhaps out of this brief dialogue in the fortieth year of ICCE, and in the tenth year of cooperation with UNESCO, these two organizations may open a new decade of even more significant cooperation.

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Predictions of things to come

What will distance education be like 20 years from now?

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Are current trends a sound indication of what will happen in the next 20 years? Miss Erdos believes that they are, despite the evidence of "passing fashions." She is confident that the increasing use of audio-visual media makes possible " a widening range of studies by distance education. Further advances in the technology of telecommunications, further experience in its use, and possibly fewer cost restrictions will still further widen the scope."

But, on the other hand, "twenty years from now distance education... will not have discarded the traditional medium which has already stood the test of time for a century."

Is it realistic to hope that correspondence education will occupy the mainstream of education? Yes, according to Miss Erdos. "Today's teaching of scientific and technical subjects by a combination of distance education and periodic attendance at educational institutions for practical work" will bring it about. The combination "will change the organisation and administration of educational institutions and bring full recognition of distance learning as an acceptable method."

These and other predictions are contained in Miss Erdos' article which follows. Not everyone will agree with all her views, but they are worth serious thought.

The present is the crystal ball into which we must look to predict what distance education will be like twenty years from now. And in our crystal gazing we seek answers to three questions: What will be taught and learned by distance education? How will distance education teach and distance learners learn? Who will learn by distance education?

In the early days of correspondence education it was believed that the only studies which could be offered were those which could be taught by the written word, for example, theology, literature, history, mathematics and language skills restricted to reading and writing. To-day an ever widening range of studies is becoming available to distance students. This extension rests on development in technology, so what will be taught and learned by distance education twenty years from now will depend largely on how the content of study can be distributed to, and received by, distance students.

To-day the tape-recorder has made possible at a distance the oral drill and twoway conversation essential to widen the teaching of language skills to include speech. With radio, records and cassette tapes we can introduce aural dimension into distance education to teach such subjects as music and short-hand; we can bring life into a study of literature with dramatization and readings of poetry and prose. With films, television, and video tape came the possibility of the visual practical demonstration required in scientific and technical studies. Audio visual learning has thus entered distance learning.

The rate of increase in the use of audio-visual media in the next twenty years will depend on the further developments which lie ahead in the technology of telecommunications, evaluation of their effectiveness in distance education, and the reduction of constraints on their use. There is no doubt, however, that distance educators will teach, and distance learners will learn, a great variety of subject content through a great variety of channels of communication and combinations of media.

Newer techniques not always effective

In the past, developments in distance education made possible by advances in technology, or introduced by innovative teaching methods, have usually been hailed with enthusiastic claims for effectiveness greater than that of the early correspondence course dependent entirely upon the written word. Now studies have shown that correspondence courses supported by radio programmes have not always been significantly more effective than correspondence courses without radio support, and the cost is much greater. Mr. John Cain has reported "The evidence is that the broadcasting medium takes secondary role to the print medium". In the late sixties there was much enthusiasm for telephone teaching, but by 1975 Dr. J.S. Daniel and Mr. Ben Turok reported "the clear impression of yet another passing fashion in the use of technology in education".[2]

Programmed learning was hailed by early enthusiasts as a complete replacement for the traditional correspondence course, and even for the class-room teacher. Long syllabi were programmed at great cost only to find that many students dropped out from boredom. These findings do not detract from the value of audio-visual media in adding dimensions to distance education, nor from such successful telephone teaching programmes as Wisconsin's ETN-SCA and the statewide Continuing Education Network in Kansas; nor do they detract from the value of programmed learning in providing short programmes for individual students needing reinforcement in certain sections of their studies. They do indicate that with the comparative studies, and with experience, we are learning when, and how, in distance education to use developments in technology and innovative teaching techniques with greater effectiveness.

Constraints which continue to limit the use of audio-visual media requiring sophisticated equipment are cost and lack of expertise. Mr. H.L. Mills and Dr. E.M. Gruetzner outline a 'Pandora's Box' of non-textual materials possible in distance education. They write "The video disc, recorded and replayed by means of a laser beam, but produced by an inexpensive stamping process, serves as a good example of a potentially valuable resource for distance education."[3]

Least costly, least complicated, not out-of-date

Doubtless in the next twenty years the constraint of lack of expertise will be reduced as a result of experiment and experience, but it is impossible to predict if cost will be reduced. Reduction of the constraint of cost will probably rest on increasing affluence, and the consequent availability of finance to education to meet increasing cost. Moreover, so greatly do economic conditions and technical skills differ in different parts of the world that it appears likely that the traditional correspondence course (the least costly and least complicated medium) will still be widely used twenty years hence.

It should also be noted that to-day, when all media are being looked at critically, and evaluated both for educational and cost effectiveness, the print medium is being seen in clearer perspective. Sir Walter Perry has said that in the experience of the Open University "in those courses which are not in science and technology, students can get by without radio and television on the correspondence material alone".[4]

Dr. Börje Holmberg writes that "old fashioned correspondence education works very well with literate students and is in my view the most important form of distance study".[5] Mrs Vijay Lakshami Sharma's analysis of the importance of the written word from the learner's point of view leads her to the conclusion that "it will never become out of date".[6]

It appears, therefore, that twenty years from now distance education will offer a wide range of studies through a combination of new technical resources, but will not have discarded the traditional medium which has already stood the test of time for a century.

The present achievement of teaching science and technology to distance learners has brought about the integration of distance instructional materials with periods of attendance at laboratories and workshops for essential practical work. This is a most significant step in the integration of distance education with the mainstream of education.

In its first century, correspondence education was usually administered by separate institutions or separate departments of educational institutions. Today in a number of universities, the studies of internal and external degree students are being directed by the same faculty; open universities are providing degree courses to distance learners by a combination of media with the support of regional tutors, study centres, and short residential sessions.

Into the mainstream

Mr. Ripley Sims writes "The integration of correspondence with mainstream educating processes adds new dimensions".[7] Mr. Sims suggests that, as a result, one of the topics on which we must "focus" will be "education institution building". In twenty years educational institutions may have integrated distance education into their routine programmes.

For example, colleges of education, giving courses of pre-service teacher education and training, may be following up these courses with distance method in-service and refresher courses, to provide continuing education and training to keep teachers up-to-date in subject matter and teaching techniques. A further prediction arising from the integrative approach is systematic training in the methodology of distance education as a regular part of teacher training.

The prediction that distance education will within the next twenty years become integrated into the mainstream of education is strengthened by today's opinion that education should be individualized to the particular learner's ability, interests, and needs. He is encouraged to learn what he wants to learn when, and where, he finds it convenient to learn. This requires a variety of packages of instructional material distributed by a variety of media. It is no longer believed that a particular goal can be reached only by one particular route.

While the measurement of achievement may continue to be by specific performance, preparation for that performance by distance education is becoming increasingly acceptable. This current trend predicts the full recognition of distance education as an effective means of learning.

Research bears fruit

To-day's growing emphasis on the importance of research and, therefore, the greater availability of finance and personnel for research, is now providing opportunity for investigation into the comparative value of different techniques in preparing instructional material and different media of distributing it, into the reaction of students to varying adminstrative procedures, into reasons for the success of distance learners, and into the reasons why some distance learners drop out.

It is not only major and costly research projects of big institutions which are bearing fruit in useful findings. Research projects in distance education for academic theses and individual studies by smaller institutions[8] are also contributing to the growing knowledge and literature about distance education. These current trends in research and publication predict that in the next twenty years distance educators will have greater knowledge of how distance learners learn and of how to meet their needs.

More adults as distance learners

And who will be our distance learners twenty years hence? With the philosophy of continuing education, the increasing need for training, and with increasing leisure, it appears that increasing numbers of adults will be seeking an increasing variety of formal and informal studies. The flexibility of distance education, its convenience for the individual, and its growing acceptability will attract an increasing proportion of adult learners. Already we see these adult distance learners in open universities, colleges of advanced and further education, distance education institutions, radio programmes combined with study groups as in Tanzania, radio programmes for the illiterate as in Papua-New Guinia, and the extension courses of many institutions and organizations.

Doubtless distance education will continue to serve, through Correspondence Schools and Schools of the Air, pupils who, because of distance or ill health, cannot attend regular schools. But some schools are now individualizing their programmes by integrating distance studies with class-room studies. Many developing countries are establishing distance education within their national systems of education. All these developments predict for the future an increasing proportion of the total population as potential distance learners. Fortunately, technology is rapidly providing education with the facilities to meet increasing demands. Computerization is speeding the processes of administration and research, and in the next twenty years will have taken over much of the routine work of recording and retrieving the information essential for research and planning.

Thus from the crystal ball of present developments and trends we can predict that twenty years from now distance education will be helping a greater proportion of the population to pursue a wider variety of studies through a more complex combination of media, and that distance educators and administrators will have greater mastery over the techniques of distance education.

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The critic comments on "Predictions of things to come"

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Like Renée Erdos I believe that distance education will be used in new subjects and by new groups. With the help of technological development, there will be in 20 years' time exceedingly few limits to the applicability of distance education. The signs of today are encouraging in this respect. We need only consider what has been achieved by radio, television, telephone, laboratory kits, and computers to realise this.

Further, I am convinced that whatever innovations occur, the printed and written word will remain our main medium in all parts of the world. What has been written or printed can be consulted again and again. Further, it is simple for anyone to use, can be used without delay, and is inexpensive.

So far I think Renée Erdos is perfectly right. On one point I find it difficult to believe in her prediction, however. That objection concerns the integration with "the mainstream of education" While on one hand it is essential that distance educators should feel primarily committed to education *per se, the subordination of distance education to bodies representing conventional education seems to me such a great risk that it must be considered a threat to proper distance education* (at least in some parts of the world).

Only the active resistance of distance students will prevent conventional educators from introducing face-to-face sessions as the main means of communication (instead of letter-writing with or without the help of the automatic typewriter, the computer or telex - or instead of telephoning). Such subordination might also lead to prescribed pacing of the studies according to rigid time tables adapted not to distance students with full responsibilities for jobs and families and with social commitments, but to "internal" students. It may also lead to lack of student independence and lack of general schooling. If these tendencies, which are already strong, should gain further ground, that would, in my view, be something of a catastrophe. It would lead to distance education losing its character!

I hope that distance education will gradually develop into a number of systems that consistently favour student autonomy. Such autonomy can make it possible for students more and more to select their own study objectives, to study (and be examined) when and where it suits them, and to have several study paths to choose from. *I doubt if that can be brought about within conventional systems in the next twenty years.*

I both believe and hope that in all societies, where in ordinary universities and schools conventional pressure tends to rob distance education of its potentials for individualisation and student autonomy, independent institutions for distance study will increasingly develop these potentials and improve our methods in the interest of students. And I am convinced that practically all kinds of adults will belong to the student bodies. We are already in the age of recurrent education and constantly need updated knowledge.

Games for conferences

Robert B. Wentworth
Massachusetts Department
of Education (U.S.A.)

Old friends greet each other enthusiastically as they meet again at each conference. But don't old friends want to make new friends? Of course they do! And what if you're a delegate without a single old friend at the conference? You certainly need some new friends!

Make friends at lunch, but try games for conferences too. It is a novel and successful way of "getting together" and getting the most out of a conference.

You may be a person who never liked playing silly games at parties. Your game leader is also such a person. But these games are different! Here silliness makes sense.

We will learn something about how to get along, to be perceptive, observant, and understanding. Come to the games with an open mind; participate to give and to receive.

(No spectators please.)

Our first game will probably be the silent introduction. Conventional introductions are so drab, so unfeeling, so uninteresting; this is a better way, even if it does take longer.

Each person chooses a partner, preferably one of the opposite sex. Each partner introduces himself/herself to the other—without writing or speaking any words! This calls for elaborate gestures, drawing of pictures, emptying of wallet, purse, or "what have you." But you learn to be friendly under difficulties. You and your partner share a challenging experience; it no doubt makes you smile at each other.

You may even laugh at yourself!

"Change two" is another game involving partners, but that's all we need to tell you now. The final game – a much longer one – is called "getting to know you" (sensitivity training).

The games serve as models which you may wish to take back to your own school. We may even have a secret traffic-light ballot to facilitate prompt evaluation of the models. A green ballot means "It's great!. I found the session very worthwhile." A yellow ballot stands for "I enjoyed it, but I'm not sure how much I'd encourage this sort of thing." The red ballot says (and you must admire the honesty of these people), "Ugh! I should have gone to a different session."

Contemplation & Expression

Co-leaders:
Dr. Vijay Lakshmi Sharma,
University of Rajasthan (India)
Dr. Donald M Cunningham,
Saint Louis University (U.S.A.)

Nearly all conference sessions are based on the assumption that words must be spoken – or possibly written – continuously in order to convey ideas and information effectively. The assumption permits many variations – lectures, question and answer periods, panel discussions, role-playing, problem-solving subgroups, the use of films and other audio-visual media, and so on.

This session, on the other hand, assumes that there is value in absolute silence. Have you been so busy at the conference that you've had no time to think? Now you can think silently with others who choose to contemplate.

Our theme to think about is:

How can we better serve our correspondence students?

The co-leaders will offer some random thoughts now and then. There will be periods – perhaps relatively long periods – of *complete silence.* Then someone will feel that he or she must speak to share a thought. We hope that our contemplation will be rewarded by expressions of thought which might not otherwise be offered.

Although a contemplation & expression session has the minimum of structure, a few guidelines are needed so that no one will unintentionally intrude on the contemplation of others. It is inappropriate to give a lecture, to discuss back and forth, to ask a question, to disagree with someone else's idea, to try to compete with someone, to try to persuade someone that your idea is better, or to criticise what someone else has said. But these restrictions are like *traffic lights;* they give us freedom we would not otherwise have. In the friendly atmosphere of *giving* ideas we will probably *get* some ideas we would not otherwise receive.

The Activities of the Commonwealth Secretariat in Correspondence Education

Rex E.O. Akpofure,
Commonwealth Secretariat (U.K.)

In the 1953 words of Her Majesty Queen Elizabeth II, the British Commonwealth is " an entirely new conception -- built on the highest qualities of the spirit of man: friendship, loyalty, and the desire for freedom and peace."

The Commonwealth has no central government, is not a confederation, and, unlike the United Nations, is not based on a contractual arrangement. Each member nation is a sovereign state with its own democratic constitution and, in most cases, a parliamentary form of government.*

Traditions vary, the nations sometimes differ sharply on political issues, but the Commonwealth somehow survives. What then binds them together? Each nation manages its own internal and external affairs, but each enjoys a common cultural heritage which provides a favorable climate for consultation and co-operation.

Political, economic, and financial matters are typical areas of common concern. But international sports competition and the whole field of education are also Commonwealth activities. The article which follows provides a comprehensive account of what the Commonwealth Secretariat has done in correspondence education alone.

*The 36 Commonwealth nations are (in alphabetical order)

Australia
The Bahamas
Bangladesh
Barbados
Botswana
Britain
Canada
Cyprus
Fiji
The Gambia
Ghana
Grenada
Guyana
India
Jamaica
Kenya
Lesotho
Malawi
Malaysia
Malta
Mauritius
Nauru
New Zealand
Nigeria
Papua New Guinea
Seychelles
Sierra Leone
Singapore
Sri Lanka
Swaziland
Tanzania
Tonga
Trinidad and Tobago
Uganda
Western Samoa
Zambia

Introduction

The Commonwealth Secretariat is an international organization at the service of and responsible to all 36 member countries of the Commonwealth. (1) It is organized in divisions and sections corresponding to its main areas of operation. Correspondence Education is primarily the concern of the Education Division whose programmes of activity are guided by the Recommendations of the Commonwealth Ministers of Education meeting every three years.The Commonwealth Education Liaison Committee, which is composed of representatives of member countries' high commissions in London, assists in monitoring implementation of such programmes and in identifying priorities for action.

There are four main ways in which the Secretariat applies itself to the support of correspondence education; and these are briefly described below:

1. The collection, analysis and dissemination of information

Interest by the Commonwealth Secretariat in correspondence education goes back nearly 15 years when the Third Commonwealth Educational Conference (2) recommended that information on the use of correspondence courses in the training of teachers and the availability of such courses should be obtained and distributed to member countries.

As a result of this recommendation, the Commonwealth Secretariat publicised this information by means of a number of publications. The first of these "Correspondence Courses in the Training of Teachers" (3) contained information provided by 16 Commonwealth countries of which only 8 at the time were using correspondence methods in the training of teachers.

Following this initial study, the Commonwealth Secretariat requested the International Extension College to conduct a survey of all government, university and non-profit making correspondence institutions in the Commonwealth. It published the results of the survey in 1974 in a book entitled "A Survey of Correspondence Institutions in the Commonwealth"(4)

From the returns received, this survey revealed that 17 Commonwealth countries had entered the field of distance teaching using correspondence methods and that teacher training featured in all of them. It also revealed that a great many more aspects of education were being catered for by correspondence and that there was a strong trend towards further expansion. A revised edition of this publication (5) listed 23 Commonwealth countries with correspondence institutions but drew attention to the fact that in place of 59 institutions listed in the earlier edition, the number had now risen to 75. Had the survey not been restricted to government, university and non-profit making institutions there is good reason to believe that the number would have been much greater.

Other books providing information about Correspondence Education published by the Commonwealth Secretariat include "New Media in Education in the Commonwealth" (1974) (6) and "A Handbook on In- Service Teacher Training in the Developing Countries of the Commonwealth" (1977) (7). In the case of the first of these titles, the Commonwealth Secretariat collaborated with the Centre for Educational Development Overseas to provide information on the various educational media (including correspondence education) being used in each country and how these were adminstered. The second title includes a number of case studies of in-service teacher training several of which have had a correspondence element in them.

2. The study of educational problems

The Commonwealth Secretariat carries out studies of educational problems in two main ways: by commissioning research and by organizing seminars and workshops. The outcomes of such studies are often further considered at specialist conferences.

Two such specialist conferences of relevance to correspondence education were held in 1975. The first of these (8) was held in New Zealand to examine the development, supply, use and management of educational materials. A paper prepared for this conference dealt with the development of teaching materials for correspondence education including lesson assignments, audio tapes, study kits, library service and broadcasts. The second specialist conference, (9) took place in Australia, and though it concerned educational broadcasting, not correspondence education, it did examine very carefully all the issues that must be taken into consideration in any distance teaching system.

The Commonwealth Secretariat organizes workshops at which correspondence education is seen as a means of helping to solve educational problems. One such regional workshop on in-service teacher education, was held for the Caribbean (10) in April 1977. Another is planned for Asia late in 1978. From such workshops, the double difficulty of training teachers in sufficient numbers to satisfy the needs of countries moving towards universal primary education and of keeping teachers up-to-date professionally after they have been trained, have been recognised as problems that correspondence education can help to solve even though it might involve radical changes to conventional methods.

An important concern of the Commonwealth Secretariat is the need for the validation and supervision of correspondence institutions for, although the majority offer a useful service, there are some which fall far short of acceptable standards. Only by an insistence on an adequate system of monitoring and supervision can correspondence institutions attain their justifiable place as a system of education.

3. The provision of technical assistance

Assistance for education in developing countries forms a part of the bilateral aid programmes of the Commonwealth's developed members. Developing countries benefit from scholarships for their students, the provision of teachers and lecturers, and, in some cases, from financial aid to expand their educational facilities. Several developing countries themselves assist others by providing scholarships and other training opportunities.

The Commonwealth Secretariat, as the central agency for Commonwealth activites, is active in promoting consultation and co-operation. Assistance in the field of education and training is a major element in the development support provided by the Secretariat through the Commonwealth Fund for Technical Cooperation (CFTC) (11). This Fund was established in 1971 as part of the Commonwealth Secretariat; it has education and training as one of its main activities. Its resources are subscribed voluntarily by all Commonwealth governments.

The CFTC arranges for persons nominated by developing Commonwealth countries to study or be trained abroad, mainly within other Commonwealth developing countries. It also provides educational consultants to governments and specialist staff for their educational institutions as well as for projects with a "multiplier effect".

One such project involving correspondence education was launched on a trial basis in 1975 for 100 Rhodesian students affected by the war situation in that country. Students were sponsored by the Commonwealth Secretariat to follow correspondence courses leading to university entrance and to full bachelor degrees in arts or sciences by a well known correspondence institution.

Another example of assistance directed towards correspondence education under CFTC is the provision in 1977 of five experts - four writers and one adviser - to develop General Certificate of Education correspondence courses in a variety of subjects for students in Lesotho, Botswana and Swaziland. It has also funded training courses for broadcasters in an effort to improve the effectiveness of distance teaching.

4. The encouragement of international consultation and co-operation

Education has long been an area of extensive co-operation among Commonwealth countries. Regular consultations among Ministers of Education and among heads of Commonwealth universities provide a framework for practical co-operation through a variety of programmes.

The wide use of English in teaching, and broad similarities in systems of education (in spite of rapid changes in some national systems) make it easy for Commonwealth countries to work together and for students and staff to move between member countries.

In the field of correspondence education, Commonwealth co-operation between the older members and the developing countries of the Commonwealth has been impressive. For example, New Zealand's long experience with correspondence education has enabled it to contribute significantly to the development of this medium in Africa, while Canada's experimental work in the education of isolated communities has been of considerable interest to countries with small scattered rural communities.

Not all the pioneering work has been carried out by the so-called "developed countries". India, for example, has achieved considerable success in educational innovation by such experiments as its Satellite Instructional Television Experiment (12) and the mass teacher in- service training courses organized by its Council for Educational Technology. Other countries have learned much from these and other developments.

It should be clear from these examples of activity, that there is in the Commonwealth Secretariat a lively interest in correspondence education and a real attempt to encourage its greater use in developing countries. To this end, the Commonwealth Secretariat welcomes information from bodies engaged in distance teaching about the resources they can offer and from developing countries on difficulties that might be overcome by applying these resources. It is the Secretariat's aim to promote such assistance and help spread the wider benefits of international co-operation.

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Copies of the publications listed above can be obtained from:

The Commonwealth Secretariat
Education Division,
Marlborough House,
Pall Mall,
London, SW1Y 5HX,
England.

Accreditation of correspondence colleges - the United Kingdom experience

John F. Phillips, Council for the Accreditation of Correspondence Colleges (U.K.)

Sometimes widespread "abuses" give rise to a movement towards accreditation. In other instances, as in the fortunate United Kingdom experience described below, the correspondence schools themselves took the initiative towards establishing an accrediting authority, educational standards and values.

Mr. Phillips, chairman of the Council for the Accreditation of Correspondence Colleges, describes a council composed of members appointed by the government and members elected by the accredited colleges. His paper deals with the council's accreditation policy, the development of the organization, its finance and operation.

He concludes that "the Council sees its future as developing further along existing lines with increased state assistance," but U.K. membership in the European Economic Community "could create problems."

I. Introduction:

In this century in the United Kingdom there were no substantial "abuses" that gave rise to any movement towards control and validation. Correspondence education was given strong impetus and support by reason of the establishment and development of the British professional bodies in the second half of the 19th century. Later, private examining bodies, representative of the professions, were set up - covering, *inter alia,* law, accountancy, administration, insurance, banking,on the one hand; and engineering, surveying, architecture, science, medicine, etc., on the other. In the absence of the provision of "official" classes of oral instruction, much depended on study by correspondence, and generally good standards were observed.

It was the correspondence colleges themselves that took the initiative towards securing the creation of an accrediting authority. Among the factors influencing them may have been the provision for statutory facilities for oral instruction, covering "after-school" activities.
Accordingly, the colleges formed a trade association and established a a code of conduct for themselves. The next stage was an approach to Government to assist in the setting up of a committee to investigate the possibilities of an accreditation system. This was the Gurr Committee

under the chairman of Dr. C.E. Gurr, a former Director of Education in municipal service. The committee duly reported in favour of accreditation.

2. **Policy for Accreditation:**

In the U.K. there is a tradition of "self-regulation". Organisations exercising a degree of control and surveillance over corporate activity tend in the U.K. to be comprised of a "partnership" between the State and the Interests concerned, rather than a Government department alone. (The Stock Exchange is a good example of this tendency.) So it was with the Council for the Accreditation of Correspondence Colleges, founded as a company limited by guarantee (i.e. having no share capital and not created for profit) in 1969. Its purpose was to promote education and in particular to raise standards of tuition (i.e. instruction) carried out wholly or in part by post. This was to be done by awards of accreditation to colleges, based on an investigation procedure. Its objective was to enhance the effectiveness of correspondence education, and to ensure the provision of a "satisfactory and responsible service" by accredited colleges.

The Council comprised, and still comprises, eleven members, of whom the chairman and five others are independent members appointed by the State; five others are elected by the accredited colleges. This ensures independence of judgement and action, while securing for the Council expert knowledge of, and direct and constant association with, the colleges themselves, and their operation.

Note that accreditation is voluntary - competition appears to have provided the necessary incentive to ensure that all significant correspondence colleges apply for accreditation. All colleges are provided on application with full details of the "coverage" of the investigation and of the preliminary information which is required from the college.

3. **Development:**

In the years that have passed since 1969, progress has been made in developing the scope and purpose of the Council. The first step was the amendment of the constitution so as more clearly to demonstrate that its objectives were intended for the public benefit. The next was the acceptance and registration of the Council as a public "charity" i.e. an organisation designed for the public good and enjoying some fiscal advantages. This paved the way to greater recognition by other national and public agencies. Finally, both financial operation and recognition were assisted by the agreement of the Government - at a time of particular national economic difficulty - to provide, through its Education Department, an annual grant towards the cost of operation.

4. **Finance:**

Originally, the cost of administration was wholly funded by the accredited colleges themselves, the respective contributions being based on a formula related to the gross fee income of the college. Now, that has been mitigated by the provision of the Government grant.

Again, each college on applying for accreditation had itself to bear the cost of the investigation, involving expenditure in many cases of serveral hundred pounds sterling.

Today, the Government grant is first applied to covering all the costs leading to accreditation or re-accreditation, any surplus being applied towards costs of administration. Yet the Council still operates on a very limited budget (about £20/25,000 sterling annually) for administration. This cannot long continue, in view of the development of the Council's work.

5. **Operation:**

The Council commenced operations by working out initial standards for accreditation, incorporating these in outline in bye-laws made under the Council's constitution, in detail in "Notes for the Guidance of Correspondence Colleges" and in a detailed memorandum for the Council's assessors (the officers of the Council who undertake the work of investigation and report). It was then necessary to create the corps of assessors - in two classifications. The first were general assessors, under a chief assessor, and the second a group of specialist assessors, required for specialized courses. The general assessors were, and are (a) recruited from the ranks of recently retired inspectors of education who are appointed by the State to investigate and report upon the efficiency of state and municipal colleges of oral instruction, and (b) from those recently retired from posts of principal or senior academic personnel of universities, colleges and polytechnical schools. Thus both types are thoroughly versed in the technique of investigation and report.

Some correspondence colleges, of course, provide specialised courses. Because these colleges are closely linked to a professional body they may themselves be "charitable" and non-profit making organisations. Thus the College of Law, an accredited correspondence college, is linked to he Law Society and to the solicitors' profession; the College of Estate Management to the Royal Institution of Chartered Surveyors and related professional bodies. There are several other examples. In such cases, for purposes of investigation, the corps of general assessors is augmented by the appointment of specialist assessors, highly qualified in the profession concerned, whose services are otern obtained by the co-operation of the professional body involved.

The operation of investgation, by the Council's mandate to its assessors, covers not only questions of the standard and value of the courses provided from an educational point of view, but also every aspect of the administration and service provided by the College. The assessors are required to report under a number of categories specified by the Council; it is a most comprehensive study of the college!

Since its inception, the Council has awarded accreditation to some 35 correspondence colleges in the U.K. These, it is thought, will cover some 500,000 students studying by this method at any one time. These colleges include virtually all correspondence colleges of significance based in the U.K.

Accreditation is meant to cover a limited period - normally not more than five years - when the process may be repeated. Since the declared objective of the Council is the improvement (and not merely the maintenance) of standards, it is most interesting to have actual experience of such improvement taking place, often as a result of suggestions and advice provided by assessors. Indeed, a modern development has been, in the case of a small college, for the assessor to give direct advice to the college (on a completely honorary basis) on the revision of its courses and administration.

Another important modern development has been the growth of colleges combining oral and "distance" instruction. The Council's view at present is that its function is to see that the correspondence element, standing alone, provides that "satisfactory and responsible service" which warrants accreditation. But, as the integration of oral and visual instruction proceeds, the Council may have to seek a review of its own constitution.

The importance of the matter has greatly increased with the development of partnerships between colleges of oral instruction and correspondence colleges. This development, most significant for educational progress and particularly for "distance education", is primarily attributable to the establishment of the accreditation procedure and the greatly increased recognition of the value of accredited correspondence courses.

Today, the modest office of the Council for the Accreditation of Correspondence Colleges virtually operates an educational advisory service, dealing with many hundreds of enquiries each year. It also deals with complaints received from students. Happily, almost all such complaints hitherto received have been of a relatively minor character and have been speedily settled by the college concerned.

6. The Future:

The Council sees its future as developing further along existing lines with increased State assistance. It already benefits greatly not only from the Government grant, but also from the expert advice and guidance provided by senior officers of the Department of Education and inspectors of education. It believes that its *modus operandi*, based on enlightened self-help and, in partnership with the State, self-regulation, is much more efficient and economical than government supervision alone.

However, U.K. membership in the European Economic Community (E.E.C. or Common Market) may affect this matter in future. The Commission of the E.E.C. has published a draft directive which, if carried into effect, would seek to bring the law and practice relating to distance education into close conformity among the nine member countries. This could create problems for the U.K., since the draft directive suggests the imposition of rigid rules which are neither suitable for nor relevant to the U.K. position. In part, the difficulty derives from the fact that the directive is based on principles of consumer protection and has no reference to educational standards and values. What is required, in the Council's view, is a much more flexible instrument, allowing for harmonisation of practice, without involving the imposition of rigid legislative control.

What should the director of correspondence study do to achieve his objective?

Doil F. Felts,
University of Missouri
(U.S.A.)

The delegates attending this problem-solving session will have an oral briefing after which they will discuss the resolution of the problem in sub-groups. Each sub-group will report back to the complete group. Solutions will be compared and the session leader -- Doil F. Felts -- will "sum-up" at the end.

The objective:

To develop an innovate correspondence course for undergraduate college credit.

The course:

"Introduction to Shakespeare" is the tentative title of the course. Although a correspondence course, it will "belong" to the English department of the College of Arts and Sciences just as much as the class courses offered by that department.

The people

Final academic decisions rest with the department chairman and final administrative decisions are the responsibility of the director of correspondence study. The Dean of Extension appoints the director of correspondence, approves his annual budget, his promotions and salary increases.
Administrative authority in the College of Arts and Sciences runs from the dean to the department chairman to the author/instructor.

The director wants a Shakespeare course which will be *innovative both in technique and course content.* He would like to have a course

1. which enlarges the learner's appreciation by the use of visuals. Each lesson will be supplemented with color **film strips** with sufficient frames to illustrate and enhance the text. A flexible, snap-ends projector which can easily be mailed will be used. As a goal, enrollees will be required to purchase the filmstrips and projector. If costs are excessive, the quantity of visuals can be reduced or materials can be rented to the learner.

2. which develops a one-to-one relationship with the instructor by the use of audio cassette tapes. The instructor will provide a commentary to accompany the series of filmstrips. As with the visuals, the student will be asked to purchase the cassette tapes if costs are not prohibitive. *Students will not be asked to respond to the instructor by tape.*

3. which may have any number of lessons within reason since the computer will be used to score and process instruction. The present plan is for 14 lessons.

4. with questions on all lessons and examinations to be in an objective format (multiple choice, matching or true-false) so that

   a. learners may respond using a single standardised answer sheet.

   b. the learners' answers will be responded to by instruction which has been introduced into a computer. Comments will be made on each wrong answer chosen by the student.

   c. the print-out of these responses will be in letter form and mailed to the student as correction and positive re-inforcement.

Course content

The course will include material on the age of Shakespeare, Shakespeare 's life, and his major plays -- histories, comedies, and tragedies. The tentative plan for course content is as follows: lesson 1, historical introduction; lesson 2, *Richard II;* lesson 3, *Romeo and Juliet;* lesson 4, *A Midsummer Night's Dream;* lesson 5, comedies, histories, and tragedies; lesson 6, *Henry IV;* lesson 7, *Henry V;* lesson 8, *Much Ado About Nothing;* lesson 9, *Twelfth Night;* lesson 10, *Hamlet,* lesson 11, *King Lear:* lesson 12 *Macbeth;* lesson 13, *Anthony and Cleopatra;* lesson 14, The Tempest.

The problems

1. The Dean of Extension must be convinced by the director of correspondence that the course as planned is worth the extra production costs. Let's face it; this dean wants $1.50 in return for every $1.00 invested. He is indeed a distinguished educator. He is open to new approaches and creative ideas, but he is quick to look at the "bottom line" in an era of dwindling resources.

2. The Dean of the College of Arts and Sciences must see the value of the project. But it is anticipated that she will not resist developing the proposed course. It adds another dimension to her college by incorporating an alternative to class courses. It will not require an expenditure from her budget and she feels she can trust her department chairman to guarantee quality.

3. The department chairman must be assured that the course in general and the supplemental materials in particular, "make a contribution to the department." She is a bit apprehensive about another assignment to this instructor, particularly when it involves work on an overload basis for extra compensation. Would it mean one less article to appear in a learned journal?. If this overload responsibility is approved, will the instructor's "regular" duties suffer? Then too, she must feel that the course will not

make the department "look bad", the course must *make her "look good" as well as serve the needs of the distant learner.* The department chairman must also be convinced that the proposed method of lesson and exam response and grading are effective and adequate.

5. The proposed correspondence instructor, who is on full-time appointment, will develop the correspondence course on an overload basis, i.e., *in addition to his full-time teaching schedule.* He is receptive to the idea of earning extra money, but realizes it will require additional work, less time with family, and less time for research and writing. This man is intelligent, creative and ambitious. He's also a bit arrogant and at times compulsive. On previous occasions he has resisted editoral suggestions and has not kept the agreed upon deadlines for completing a course. But he's a respected authority on Shakespeare!

The Resolution

How should the director resolve the overall problem? In order to solve it, consider first several sub-problems of which the following are typical:

1. The Dean of the college, the department chairman, and the proposed author/instructor are likely to be less enthusiastic than the director about the use of the computer. (a) What is each of them likely to say to the director? (b) What should the director say in reply?
2. Which alternatives are optional – which required of the director?
3. How should the director "handle" the sensitive personalities? Give separate answers for the Dean of Extension, the Dean of Arts and Sciences, and the department chairman. For example, a. At what points does the director of correspondence insist? b. On what points can the director compromise?
4. How should the director deal with the proposed author/instructor of the course?
5. How can the director make sure that the author will complete the study materials satisfactorily? i.e., overcome the author's shortcomings.
6. Should the director seek a different author and, if so, how can the change be made without alienating the first author and possibly the department chairman?
7. Should the director first "sell" his idea for the course to the Dean of Extension or to the department chairman? Why? What strategies should he use with each?
8. If the Dean of Extension disapproves the course, what options, if any, does the director have and how workable is each option?

In what new ways can we increase our enrolments? A brainstorming demonstration

Robert B. Wentworth,
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Problems exist; they must be solved. Will they be solved in a routine way or will they be solved creatively?

Routine solutions may depend almost entirely on facts, not enough on new ideas. We need facts, but we need to use them creatively.

Creative problem-solving of any kind, if properly managed, has academic respectability. Extensive scholarly research has been done by social scientists in several disciplines. The authoritative Applied Imagination *by the late Alex F. Osborn has been translated into several languages and widely used.* The Journal of Creative Behavior, *published quarterly by the Creative Education Foundation, carries research reports on such varied topics as "General systems: a creative search for synthesis" and "A master of education degree in elementary education with an emphasis on creative teaching-learning."*

This presentation describes brainstorming, *one of many methods of creative problem-solving. Brainstorming has been widely used by such diverse organisations as the United States Air Force, General Electric, International Business Machines, United States Steel, University of Chicago, State University of New York, Massachusetts Institute of Technology, and many others.*

ICCE conference delegates will be able to see a brainstorming panel in action, ask questions, and make comments after the demonstration.

Brainstorming[1] is a conference technique in which a group accumulates a large pile of alternative ideas in attempting to solve a specific problem while withholding all critical judgement. It is a massive intellectual attack on a problem.

In a typical committee meeting whenever someone suggests an idea someone else is likely to condemn it. Often individuals are either too cautious to suggest an idea or too bold in defending a favourite idea against all others. If one committee member is of higher rank than the others, his rank, the nature of his remarks, and even his facial expressions tend to limit the suggestions made by others. The committee members assume that they should make only "sensible" suggestions.

Not like a committee

Brainstorming, when properly undertaken, is unlike a committee in several respects. In the first place, the brainstorming panel which seeks to find alternatives does *not* have day-to-day responsibility for the specific problem before it. The person with the problem goes to a brainstorming leader (either within his organization or on the outside) because he wants answers beyond those which he and his staff are likely to discover in the usual manner.

Secondly, the brainstorming panel is chosen because above all else it is *creative*. (Members of a committee are often chosen because of their position and/or what they know.) It should include some people with a knowledge of similar problems elsewhere plus some "guest panelists" who are creative people who have never dealt with the problem before.

In the third place, members of a traditional committee usually represent different units, different functions, or even different regions. There is a tendency for each person to compete against the others, to seek individual recognition either through advocating a course of action or by blocking action. In brainstorming there is *no individual recognition*. The new ideas suggested are the result of group action; no record is kept of who said what. Furthermore, there is no immediate superior present to evaluate the work of his employees.

Fourth, a committee discusses a problem, trying to get the hot water of creativity and the cold water of critical or judicial thinking from the same faucet (people) at the same time. The result is likely to be a mixture which is neither hot nor cold, although committees are likely to better at criticizing than at "thinking up." Brainstorming emphasizes *creative thinking;* it postpones *critical thinking* until later.

Fifth, a committee tends to debate "sensible" ideas while overlooking the possibility that better ideas might be found by seeking them imaginatively. Brainstorming, on the other hand, welcomes all ideas whether "sensible" or "foolish." Often the "foolish" ideas prove to be practical or at least they can be modified into useful ideas.

What is the procedure?

In the beginning there is a "problem mess." The problem must be stated in a single sentence, preferably a question. Everything else is either background information or supporting data.

Problems which can be resolved on an "either—or" basis are not appropriate for brainstorming. (Example: Should the college restrict enrolments to students over age 21? Here there are two choices: yes and no.) Brainstorming seeks to accumulate many choices which will be evaluated later.

Now here are the steps in solving an enrolment problem by brainstorming. —We examine the whole enrolment procedure to see how it might be improved. The panel leader, in consultation with the "applying executive" (the person who seeks outside help on his problem) isolates the problem. This has already been done for our demonstration panel. The problem in a single sentence is: "In what new ways can we increase our enrolments?"

—The panel leader chooses a panel and, if necessary, trains the panel. Some background information about the problem is given the panel members when they are recruited. Sample ideas are given. Members are encouraged to think about the problem before the panel session, to write down any ideas which may occur to them.

—Next comes the brainstorming panel session itself. The "applying executive" or his representative may be present for a few minutes to provide more information or answer questions briefly. But then he must leave! Now the exciting, dramatic, and sometimes hilarious part begins. Observors who see only this part of brainstorming gain a false idea. Obviously, when a dozen or so people shout out their ideas as rapidly as possible (without explanation or discussion), some of those outbursts are bound to be impractical, illegal, or even immoral!

But the whole success of the procedure depends on withholding judgement while ideas are being accumulated. There is abundant research evidence that as the quantity of ideas increases, a greater number of usable ideas and ideas worth investigating are accumulated.

The four basic rules

An able panel leader will remind his panelists of the four basic rules of brainstorming[2] (as established by Alex F. Osborn).

1. *Criticism is ruled out.*
2. *"Free wheeling" is welcomed.* (This means "be as wild as you like." Wild ideas encourage others to think freely.)
3. *Quantity is wanted.* (The leader will encourage quantity by constantly urging the panel to do a little bit more, to think about this possibility and that possibility, and so on.)
4. *Combination and improvement are sought.* (Ideas accumulate rapidly when modifications, combinations and improvements are contributed quickly by several panelists after a single suggestion by one panelist. Although panelists may throw in a few ideas they brought with them, most of the ideas arise spontaneously from the action of the group. Since each idea is stated in a phrase or a sentence, it would not be unusual to accumulate 75 to 100 or more ideas during a half hour of active brainstorming.

All ideas must be recorded. Ideally, a secretary and a tape recorder are used. If recording equipment is not available, it would be helpful to have two secretaries.

Each one could take down alternate ideas. Lines on the notebook pages should be numbered in advance so that a secretary can tell the leader how many ideas have been piled up while the session is still in progress.

The final steps

The day after the brainstorming panel session the leader or his assistant should telephone the panel members to ask if any additional ideas have come to mind since the session. Usually the panelists have a few more ideas. It is also a good time for the leader to say "thank you" again.

Now that the ideas have been collected, they must be organized into appropriate categories. (In the enrolment problem some of the categories might be media ideas, salesmanship ideas, public relations ideas, ways to spend more money, ways to spend less money, and so on.)

Now the ideas in each category are evaluated. Working with one or two others on the panel who have appropriate experience, the leader determines which ideas are good enough to be recommended to the "applying executive." The leader may either submit the recommended ideas only or all the ideas with the recommended ones indicated by a star (*) or in some other convenient way. So-called "foolish" ideas are sometimes withheld if the "applying executive" is likely to be too critical of the method. But sometimes also a "foolish" idea is deliberately modified until it becomes something sensible and practical.

The executive with the problem will further screen the ideas and presumably select the most promising ones for further consideration.[3] His decision-making process is the same as before except that he has more good ideas to consider. The final results may be better than would have been obtained by the usual committee meetings alone. Judgement has not been eliminated; it has merely been postponed for the sake of better results!

Notes

1. Brainstorming is a dictionary word. The modern practice of brainstorming began in the late 1930s in a New York advertising agency. But a similar procedure was used in India for more than 400 years. The Indian name for the method is *Prai-Barshana. Prai* means "outside yourself" and *Barshana* means "question." (See Alex F. Osborn, *Applied Imagination*, third revised edition, 1963, Scribners, page 151.)
2. *Applied Imagination*, page 156.
3. The ideas developed by the demonstration panel will be organized and evaluated for publication in the Proceedings of this conference.

* Note A The Creative Education Foundation, founded by Alex F. Osborn, is located at State University College at Buffalo, 1300 Elmwood Avenue, Buffalo, New York 14222, U.S.A. Inquiries are welcomed.

ARE YOU A CREATIVE PERSON?

If so, here's a rewarding experience for very little work.

Twelve people—about equally men and women—are needed to participate in a brainstorming demonstration in New Delhi, India.

Previous brainstorming experience not required, but you must be the kind of person who (a) likes to make all kinds of suggestions, (b) is adventuresome enough to try something new, (c) is a team player who follows simple rules faithfully, (d) sees Roman chariots and food for the gods in a sunset and (e) believes that useful work can be fun.

The problem to be solved creatively by a brainstorming panel is "In what new ways can we increase our enrolments?" Would you like to be on that panel?

Some of the 12 brainstorming panelists should be educators who have responsibilities which include finding new students. Other panelists should *not* have such responsibilities. ICCE membership not required; spouses guests, and others may apply. But you must register for the conference. *Then you may apply simply by telling in a few words why you are qualified.*

If chosen, you will receive through the mail several pages of reading material. You will be asked to attend a training session (one hour to one and one-half hours) which will probably be held on Monday, November 13, the evening before the brainstorming demonstration.

If interested, send a YES message and a brief statement of your qualifications to Robert B. Wentworth, Bureau of Adult Services, Massachusetts Department of Education, Park Square Building, 31 St. James Avenue, Boston, MA 02116 U.S.A.

How to Reduce the Number of Dropouts

Edward C Estabrooke,
The American School
(U.S.A.)

Reducing the number of dropouts involves much more than initial words of encouragement and a series of follow-up letters. Objectives, materials, services offered, admissions practices, educational policies, and research are some of the factors involved in the dropout rate.

Dr Estabrooke's paper which follows deals entirely with accrediting standards. The National Home Study Council standards are presented in detail.

In his oral presentation at New Delhi, Dr. Estabrooke will (a) discuss the importance of these standards in reducing dropouts (b) and offer research findings which show how his school and others have reduced their dropout rates. An important part of the session will be small-group gatherings at which everyone in the larger group will have an opportunity to offer additional constructive suggestions.

Any correspondence school in the world that wants to reduce the number of its dropouts must first meet the following basic standards:

I. EDUCATIONAL OBJECTIVES must be clearly defined, simply stated, appropriate, readily understood and reasonably attainable by the types of students enrolled.

II. EDUCATIONAL MATERIALS should be:

1. Comprehensive enough to achieve the objectives of the course.
2. Up-to-date and accurate to reflect current knowledge and practice.
3. Prepared by qualified person(s) competent in their fields-specifically for home study students, or adopted to their use.
4. On a reading level keyed to the reading competence of the average enrollee in the course.
5. Accompanied by suitable instructions on how to study the course and learn effectively.
6. Organized and presented in accord with sound psychological principles of learning.
7. Enhanced by effective use of teaching devices and supplemental instructional aids.

8. Effectively illustrated where appropriate with photographs, charts, diagrams, etc. of functional, educational or inspirational value.
9. Attractive in layout and format, legibly reproduced, and suitably bound.

III. EDUCATIONAL SERVICES should include:

1. Submission of examinations that effectively test on the knowledge and/or skill required and that are evaluated, with instructional assistance if necessary, and returned to the student.
2. Resident (terminal training) if necessary to attain the stated educational objectives of the correspondence course.
3. Willing, prompt and effective handling of relevant inquiries from students.
4. Adequate provisions to meet individual differences and provide counseling and guidance as required to assist the student to attain his/her educational goals.
5. Encouragement and help for failing students until they demonstrate satisfactory progress or are cancelled with adequate refund for inability to profit from the course.
6. A constructive program to encourage students to start, continue and finish their courses.
7. A continuing plan for securing the reactions of students to their courses — as one basis for evaluating and improving instructional materials and services.

IV. STUDENTS SERVICES should include:

1. Prompt return of accurately graded examinations.
2. Provision of ample study materials at all times to the student and maintenance of essential student records.
3. Availability of competent counseling upon request from students.

V. STUDENT SUCCESS AND SATISFACTION should be insured by proof that:

1. A high proportion of students are satisfied with the training and educational services.
2. A satisfactory percentage of enrolled students start, continue and finish their courses.

VI. **FACULTY QUALIFICATIONS** should assure:

1. A qualified person- principal, educational director or equivalent, has overall administrative responsibilities for the educational program involving editorial, research and student service functions, and a policy-making voice in the merchandising and tuition-collection activities of the school.

VII. **ADMISSION PRACTICES** should assure that:

1. Only students who can reasonably be expected to benefit from the course are enrolled.
2. The written enrollment contract or application specifies clearly the nature and scope of the course, the services and obligations to which the school is committed and the privileges and obligations, financial and otherwise, of the student.

VIII. **ADVERTISING AND PROMOTION** of correspondence courses should assure that:

1. Advertisements, and promotional literature make only clear and provable statements.
2. Field representatives (salespersons), if used, are ethical in all respects, adequately trained, supervised and responsible directly to the school.

IX. **FINANCIAL RESPONSIBILITY** should assure that the school can meet its financial obligations and provide satisfactory services to its students.

X. **TUITION POLICIES** should assure that:

1. The tuition charge is reasonable in light of the educational services rendered and the school's operating costs.
2. Tuition collection policies and procedures are fair; they encourage the progress of students and seek to attain their good will; they are in keeping with sound, ethical business principles.
3. Tuition refund policies provide for equitable tuition adjustment if, for legitimate reasons, the student is unable to complete the training with benefit to himself/herself.

XI. **PLANT AND EQUIPMENT** should:

1. Be adequate to handle the educational program and comply with local fire, building, health and safety requirements.

2. Insure that all educational, financial and other essential records are maintained in a safe, fireproof and reasonably accessible place as long as they are likely to be needed.

XII. RESEARCH AND SELF-IMPROVEMENT should include:

1. Use of sound research procedures that measure how effectively the stated course objectives are being met.

2. Evidence that the school staff is progressive in its efforts to improve operating efficiency and service.

3. Evidence of professional growth of the school's faculty and staff.

4. An established self-study program that reflects a desire to improve course materials, services to students and growth of the school, its faculty and staff.

The standards indicated above are those of the accrediting commission of the National Home Study Council, 1601 - 18th Street, N.W., Washington, D.C. 20009, U.S.A. I've had the privilege of serving as a member of this commission for nine years and as chairman for two years. The accrediting program of the National Home Study Council has greatly increased the effectiveness of member schools and has helped them to serve students well.

HOW WE WILL HANDLE THE DROPOUT TOPIC AT NEW DELHI

This is my proposed procedure for discussing "How to Reduce the Number of Dropouts." You will note that participation by everyone present is an important part of the session.

1. (Fifteen minutes) Distribution of printed copies of accrediting standards to all participants; discussion of the relative importance of these standards to our problem of reducing dropouts.

2. (Fifteen minutes) Presentation of American School research which shows a very substantial decrease in dropouts; presentation of a National Home Study Council survey which shows how educational directors in member schools decreased non-starts and dropouts and increased completion rates. Distribution of 30 - 45 - 90 day educational follow-up letters and other tangible evidence of efforts to reduce dropouts.

3. (Thirty minutes) Break up into three smaller groups for *active participation by everyone*. Each small group should develop additional constructive suggestions for reducing the number of dropouts. These suggestions will be recorded by a rapporteur in each group.

4. (Thirty minutes) Reuniting of groups for five minute summaries by each of the rapporteurs. Evaluation discussion by all participants and a final summary by E.C. Estabrooke.

The whole amazing process of developing, publishing, testing, and revising in-house educational materials.

Milton Gussow
McGraw-Hill Center for Continuing Education
(U.S.A.)

No matter what the size of a correspondence school, the basic functions are the same. In a large school, however, it is easier to identify individual steps in a total course development and publishing plan.

The paper which follows describes the five stages of development (creative, production, procurement, quality control, printing & shipping) which characterize the McGrawHill Center for Continuing Education.

Once the completed courses are issued to students, new problems arise. When should a given course be revised? What can the school do to raise its student completion rate? Can the school achieve a completion rate high enough to make the course financially profitable, even if students pay only for lessons completed?

Various factors influence the completion rate. Milton Gussow feels that the course materials themselves are the most important factor. Ten guidelines are given for preparing effective teaching materials.

The McGraw-Hill Center for Continuing Education (CCE), located in Washington, D.C., U.S.A., is one of the largest correspondence institutions in the world. It comprises two home study schools: the National Radio Institute (NRI), founded in 1914 and the Capital Radio Engineering Institute (CREI), founded in 1927.

The size of the McGraw-Hill's Center in many ways dictates the management policy of operating the Center and therefore lays the foundation to this whole amazing process of developing, publishing, testing, and revising in-house education materials.

As size indicators for the Center, consider these data for the year 1977:

Number of active students: 125,000
Number of students enrolled per year: 36,000
Number of correspondence courses: 58 in the area of electronic and mechanical technology

Number of new courses introduced:	3
Number of training kits packed and shipped:	275.000
Number of employees:	380

As a large correspondence institution servicing 125,000 students, McGraw-Hill CCE needs a unified management structure that can oversee the quality control of all aspects of a student's education. The best approach, we think, to assure quality control is to "do things in-house." This doesn't infer that every single activity is performed in-house -- we do go outside for authors and we have a large volume of printing done by outside printers. But essentially we have the people, the machines (including computers), and the systems to carry out the cycle from creativity to delivered educational product within the walls of CCE.

The five stages of course development.

Let me discuss in a brief way how CCE is organized to carry on the cycle of in-house development. The Center is divided into functional areas of activity. Figure 1 shows the legend to interpret the functional block-diagram structure of Figure 2.

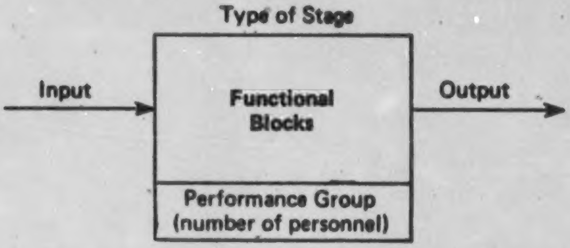

Fig. 1 Legend for functional block form

1.There are five major stages. The first stage is the *creative;* (See Fig.2). The creators of the educational materials belong to the product development group. They are technical writers and developers of training kits. All have a vast technical background and demonstrated experience in their field of expertise. In planning a course, they will read all pertinent literature, visit with industry, perform bench experiments, and do other related research activities. (I am assuming that a specific course for development has already been approved by the executive committee representing education, marketing, and finance.)

A course consists of a given number of lessons or units, a unit being identified as one requiring a written exam for the student to submit to the school. For each lesson, a technical writer and a technical editor are assigned. Each technical person has the ability to write or edit and is called upon to do either task.

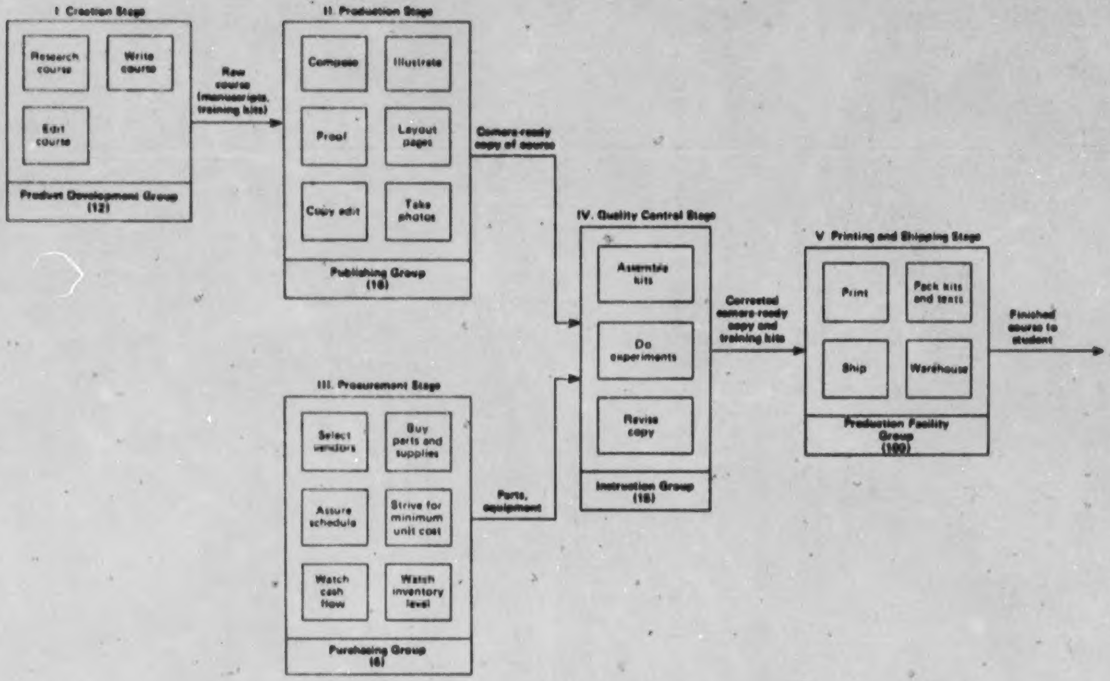
I Creation Stage
Research course
Write course
Edit course
Product Development Group (12)
Raw course (manuscripts, training kits)
II. Production Stage
Compose
Illustrate
Proof
Layout pages
Copy edit
Take photos
Publishing Group (16)
Camera-ready copy of course
III. Procurement Stage
Select vendors
Buy parts and supplies
Assure schedule
Strive for minimum unit cost
Watch cash flow
Watch inventory level
Purchasing Group (6)
Parts, equipment
IV. Quality Control Stage
Assemble kits
Do experiments
Revise copy
Instruction Group (15)
Corrected camera-ready copy and training kits
V Printing and Shipping Stage
Print
Pack kits and texts
Ship
Warehouse
Production Facility Group (100)
Finished course to student

Fig. 2 Functional Block Structure on Cycle of In-House Development for McGraw-Hill Correspondence Courses

Product developers consist of a project leader and a team. The project leader is responsible for his program from the beginning of development to the point where it is on-the-shelf to be delivered to students. Since accountability is vested in one individual, (1) *we achieve* a high degree of motivation of the project leader and his team members in that their performance is identified in the quality of their product; (2) *we create* a focal point for information on that project needed by all groups within the Center; and (3) *we establish* responsibility for the leader to "push" others, particularly supportive groups, to get his project done within the constraints of performance, time, and money.

2.The second stage is *production*. Here the publishing group takes the technically edited manuscript, edits it further and then has it set in type (IBM/MT/ST cold-type composer). At the same time illustrations are being prepared. Galleys from the composer are proofed against the original copy. Then with illustrations and smooth galley available, the editorial assistant cuts and pastes the layout (the pages of the lesson) until it is ready to be photographed for offset printing. This group is so versatile that on the premises it also takes photos of equipment, makes negatives and proofs, and sizes photos by an enlarger for pasteup.

Schematics, line drawings, manufacturing drawings, free sketches, and other illustrations are done by our technical illustrators. Manufacturing drawings, along with specifications, are given to metal manufacturers who stamp out molds for the chassis and consoles of our training kits, and then they provide us the metal work which forms part of our training kits.

3. The third stage in the development cycle is *procurement*. It deals with procuring parts for our training kits and all supplies for the Center. Many dollars can be saved by selecting quality vendors who sell goods at a minimum cost per unit. The Center stores over 30,000 different parts and supplies provided by about 250 different vendors.

Double-digit inflation, long lead time for critical parts like TV picture tubes and TV tuners, and labor strife are some of the day-to-day problems we face in keeping costs down and having educational material flow on time to students. Inventory levels must be kept at minimum consistent with good service to the students. High inventory levels hurt cash flow and liquidity. Inventory levels in 1977 were valued at 3 million dollars.

4. In the fourth or quality control stage, the written text and the hardware training kit material are carefully reviewed by both technical and non-technical persons who were not involved in the original development. They read all the material, carry out all the steps in assembling the kits, perform all the experiments, and then take the written examination. In effect, they act as our correspondence students.

I don't need to tell you how very essential this stage is. Often we revise the experiments because they were too difficult or their results non-repeatable. All changes to copy, of course, must go back to the production stage for their incorporation on the camera-ready copy.

5. We are now ready to print the written material and pack the kits. Here is where stage five enters; *printing & shipping*. The material may be printed by us (72" Harris press) or by an outside printer. Packing guides for each shipment of material are issued. Small parts like nuts, washers, resistors, and capacitors are pre-bagged. All kits are skin-packed to keep parts together and clean. All complete packages are checked before being placed on the shelf.

To perform these described functions, we have a physical plant facility of over 120,000 square feet. The first four functional stages of development are performed at the headquarters building (65,000 square feet) in Washington, D.C.; the fifth functional stage is done at two production facilities (58,000 square feet) located in Beltsville, Maryland, about 15 miles from Washington.

In summary, we see that the many students we serve with our different product lines make necessary a functional complexity which can be controlled. The factors for this control are functional organization, defined lines of responsibility, individual accountability, smooth flow of communications, awareness of cost, and a dedication by all to the concept that timely and correct service must be rendered to each student.

Our in-house organization (1) permits us a quick response time within which to develop or modify product lines in tune with the marketplace (McGraw-Hill was ready with the first home study course on citizen's band (CB) radio when the CB boom hit in 1976); (2) is economical in comparison with the cost of work performed by outside agencies; (3) provides a high degree of quality control so that our students will be satisfied with materials and service; and (4) instills in our people a high sense of identity with the products they develop-- a uniqueness with respect to training kits that is exploited in advertising McGraw-Hill products.

When to revise

Now that the students have received their educational materials, other activities take place -- we receive unsolicited comments from our students,we examine grade distribution for each lesson within a course, we make detailed studies on lesson completion rate, we conduct our own CCE surveys as well as those required by the US Government, we read the journals to detect changes in the state-of-the-art, we talk to our colleagues at conferences and seminars. All these factors are considered. Should we revise or not revise?

Look at the input factors for course revision in Fig. 3. Can you surmise which one carries the most weight in decision making?

The factor for your school may not be the same as that for the McGraw-Hill Center. Conditions -- economic, political, legal -- are different for each part of the world. The factor that carries the most weight in the U.S. is *lesson completion rate*. By that, I mean the ratio of the number of lessons actually submitted by the students over a specified period of time to the total-number of lessons in the complete course. (This definition of lesson completion rate is the one accepted by the National Home Study Council of the U.S.) Why is this factor so important?

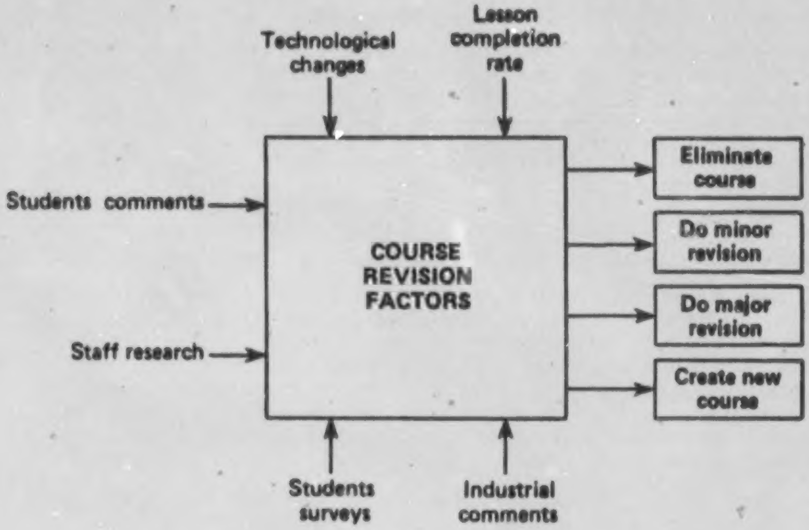
Technological changes
Lesson completion rate
Students comments
Staff research
COURSE REVISION FACTORS
Eliminate course
Do minor revision
Do major revision
Create new course
Students surveys
Industrial comments

Fig. 3 Decision Factors for Course Revision

Up the completion rate

Improving the lesson completion rate is important because it is tied in with the financial vitality and survival of proprietary correspondence schools. Within the U.S. there is a consumer movement to enforce a straight pro rata refund and cancellation policy. Let me illustrate this with an example. A student purchases a correspondence course of 50 lessons for $1000 dollars. Each lesson then has a pro rata value of $20.00 dollars ($\frac{\$1000}{50} = \$20.$) The straight pro rata policy states that a student is obligated to pay only for those lessons submitted and corrected. If he completes 30 lessons and then decides to quit, his obligation is $600 dollars. If at the time he quits, he has paid the full tuition of $1000, the school must refund him $400 dollars.

This type of refund policy generally doesn't permit a school to recover the full front-end expenses of advertising and marketing, the amortized cost of development, and the full cost of educational materials and services. Further, there is the fixed overhead (rent of the building, maintenance, heat, and electricity) that must be paid regardless of the size of the student body. In short, with straight pro rata in force, most schools will not have the cash to support their operation and will have to declare bankruptcy.

What is the answer *if* pro rata becomes a fact of life enforced by state and federal laws? We must make sure that every student completes his program so that he will be obligated to pay the full tuition price. In other words, the goal is a 100% lesson completion rate. We must strive to have all our students graduate!

Can one think of a more consummate challenge where the "best" of education is inextricably entwined with the "best" of financial profitability? Education and profitability go hand-on-hand. If you produce lessons with a high completion rate, the students will pay (monthly instalments is the normal way) so there will be sufficient inward cash flow to provide a profitable operation.

The major and practical question then facing us is: how do you bring about a significant increase in the lesson completion rate? As you know, there are a variety of things you can do: rewrite the material, reduce the scope, change the format, redo the illustrations, modify the motivational letter series, rewrite the examinations, reduce the number of pages, screen more stringently prospective students, change instructional format, use computers in a personalized way, accentuate instructor/student feedback, increase the number of training kits, and many others.

To perform some of these actions and maintain, at the same time, educational integrity, you need a strong, unified functional structure, (see Fig. 2.)

To increase our lesson completion rate, we first examined our *current* completion rates. Figure 4 shows two typical completion curves, one for a technician course and one for an engineering course.

The technician program, because it is simpler and less mathematical, has a higher completion curve. A 60% graduation rate for the technician-oriented course (72% rate required to break even) is marginal in light of a pro rata policy. In contrast, a 15% graduate rate for an engineering course (35% rate required to break even) is unsatisfactory.

Having selected courses identified with low completion rates, we quickly planned a major "sweep through" of our courses. This "sweep through" consisted of taking simultaneous actions in the following educational areas: we simplified explanations; reduced those topics needed to achieve the students' performance objectives; increased the number of worked-out examples; increased page size (new standard 8-1/2 x 11") and type face (new standard 11-point). In the case of technician courses, we converted all examination questions to the objective type for computer grading and gave more personal attention to each student. In short, we redid the course -- gave it a new, updated look both in substance and appearance.

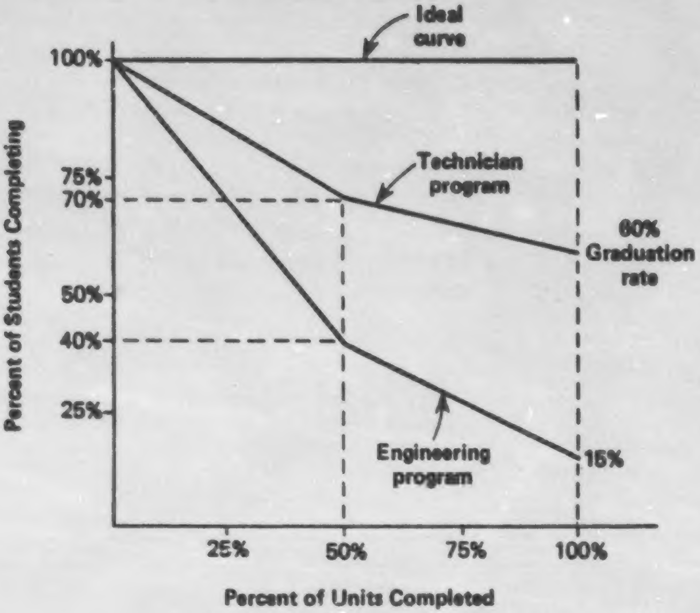

Fig. 4 Student completion curves for technician and engineering correspondence programs.

Some commandments on the preparation of course materials

There is not sufficient time to describe in detail each action of the "sweep through" nor is that the purpose of this paper. However, I must state that the *most important element in raising the completion rate is the preparation of educational materials* because a student spends most of his instructional time with the lesson text, assembled kit, or laboratory experiment.

The Center has developed and issued the 10 ABC's of course development to sensitize all development persons to the importance of a high completion rate.

1. Write simply and clearly in short sentences. Long sentences discourage a student from continuing his studies.
2. Write in a personal and engaging style, but don't be demeaning.
3. Reduce a complex subject to its simplest terms. Sophistication and complexity are not friends of the independent learner.

4. Cover only those subject areas needed to reach a stated educational objective. The independent learner desires to reach his goal in the quickest time possible.
5. Write at a reading level below that of your anticipated student body. Writers tend to overestimate the comprehension ability of their students.
6. Organize the material in a step-by-step manner, never introducing new principles or concepts without first explaining them completely.
7. Use liberally illustrations, charts, and numerical examples to simplify comprehension.
8. Introduce self-test questions or exercises after no more than ten pages of discussion -- fewer pages if possible. The independent student needs a change in pace and a barometer for evaluating his progress.
9. Mix mathematics lessons with electronic ones. Don't place more than two "math" lessons next to each other. Learning "math" independently is formidable. A concentrated dose of "math" may cause the student to drop out.
10. Build up the confidence of the independent learner by having fewer pages in the beginning lessons. For example, the beginning lessons may average each 20 pages, while the later ones average 40 pages.

Some "sweep through" results on completion rate are in. For most courses, it is still too early to determine what the rate is because new programs must be studied for at least a year by a student body before completion data can be ascertained. But the scoreboard looks like this:

Course	Old Completion Rate	New Completion Rate
Automotive Servicing	44%	70%
Air Conditioning	—	74%
Electronic Technology	35%	60%(preliminary)
Communications	30%	55%(preliminary)
TV/Audio Servicing	53%	65%

In summary, the McGraw-Hill Center for Continuing Education has organized its activities and responsibilities along functional lines with emphasis on in-house development and quality control. In the real world of financial survival, improving the lesson completion rate becomes an essential problem.

The integrated organization of the Center is playing a major role in facing that problem. The results are higher lesson completion rates. Still the challenge of further rate improvement remains. To that challenge, McGraw-Hill remains committed.

Memories of Marketing

Dr. Homer Kempfer,
Continuing Education Council
(U.S.A.)

Many observors describe the present effectively; some point out needs which are urgent. Still others predict the future with confidence. But here is a different view.

Dr. Kempfer recalls the way it once was. Although there is constant change, he points out, certain principles, certain observations still seem to be true. Cross-cultural adoption of selling practices (for example) is risky. In this article you'll see why.

The National Home Study Council mentioned below is the organization of accredited, self-financed correspondence schools in the United States. Its membership does **not** *include the private and government colleges and universities which have a strong association of their own -- the National University Extension Association. Members of the latter group advertise in various ways, but they do* **not** *employ salespeople.*

I am not a "marketing man" but I remember tidbits gleaned while serving as executive director of the National Home Study Council (1952-58) before going to New Delhi as adult education advisor to the Indian Ministry of Education.

We never settled the issue of whether it was generally wiser--better--or more economical to seek correspondence course enrollments by advertising and direct mail or through agents. It all depends on many factors.

Correspondence schools can control exactly what is said in periodical advertising, letters, and brochures. At one time the National Radio Institute used a sequence of 13 mailings to sell its radio repair course. Tests showed that under prevailing printing, mailing, and postage costs, each of the 13 was worth the effort. A 14th mailing brought too few additional enrollments; it was not worth the cost. This experience was with highly mechanized equipment, rather expensive labor costs, and a high volume of leads obtained largely through advertising.

As is common with other adverising and direct mail selling in the United States, correspondence schools constantly checked color, writing style, course length, art work, time between mailings, and other variables by controlled experiments. "Long copy" was generally considered to sell better than short copy in letters and brochures.

Agents usually worked on commission and, if hungry, sometimes found it easy to overstate. Still a good many private schools were able to hold a tight rein on their sales agents. Sales forces of large schools often numbered several hundred. By close supervision, checking back with newly-enrolled students, properly structured remuneration and incentive plans, and constant training, a number of schools were able to keep a high degree of ethics in selling. Inept managers, of course, either were not able to do so, or did not care. They gave the government good reasons to step in with "cease and desist orders."

A very few schools placed their sales people on salaries with a minimum number of enrollments required. This arrangement sometimes helped ease the ethics problem. Most school managers, however, swore that a salesman would not work unless he was on commission--or that those on commission worked harder. Neither the ethics nor the production problems are that simple.

One good incentive plan to encourage honesty in selling ties the pay of the salesman to the progress of the student. If an agent receives all his reward immediately upon enrolling a new student, he will be tempted to enroll large numbers by high pressure methods without trying to identify those who will stick to their studies. However, if most of his pay comes in increments as the student progresses through the course with a good bonus at the end, he will be more likely to want to enroll only those truly interested, motivated, and able to finish the course.

Successful selling of correspondence courses requires careful sales training. Most people with school experience understand instruction in a classroom, but they may not understand studying by correspondence. Motivation derived from association with other students in a class does not work in the isolation of correspondence study. It is the salesman's job to find that *internal motivation* and build upon it until the student is successful.

Sales practices that work in one country often do not work in another culture. That became clear when I visited a number of correspondence schools in Germany, Denmark, Sweden, and Norway in 1957 and later as I visited such schools in India and Africa. In European countries practically all enrollments were then sought by advertising and direct mail. Some years ago one of our famous correspondence schools tried to establish itself in Europe, apparently did not learn fast enough how to sell in the European market,and went bankrupt through overexpansion and mismanagement.

Our correspondence schools found that they could not sell in Latin America as they did in the USA. Most tuition (i.e. money paid for instruction) in correspondence courses in the USA is paid on the installment plan. By requiring a relatively small down payment and a small payment each month, correspondence schools appeal to a broad market which includes many people too poor to pay for the whole course outright. Indeed correspondence instruction can be considered the poor man's way of getting an education. Since installment buying permeates the lives of most Americans, they understand paying for correspondence courses on a monthly-payment plan.

In those years installment buying was *not* understood in Latin America. There, when one bought something, it was paid for at once. The idea of repeated payments month after month was unfamiliar and was resisted. Enrollees felt that if they paid for the course once, why should they pay for it again?

In generalizing, I would say that cross-cultural adoption of selling practices is risky. Outsiders often do not know the value systems of other cultures. They may not know what will appeal to different cultures or what will work. (Insiders often do not know either.) To be successful, any recruiter or salesman will have to *know his culture and make it a matter of constant study*. He must also remember that cultures evolve and change. Systems and ideas that worked 20 years ago may not work today.

Managements that study their markets and pinpoint their efforts accordingly are more often successful than those who scatter their sales efforts widely. It is well worth the effort to study statistics of age, sex, income, occupation, educational level and related characteristics by geographic regions. Studies in the USA show clearly that those managments which analyze well their populations have more enrollments than those who do not.

If one has, or can get, such data on enrollees, they can be matched with the general population data. One can see where the potential lies--in what ages, occupations, educational levels and geographic regions.

Many conventional educators assume that correspondence study is for the isolated and rural people and expect most enrollments to come from such areas. Some schools were surprised to find that *urban areas supplied their proportional share of enrollees*. Presumably with the rich adult education resources of school and college classrooms in urban areas, city people would not need correspondence courses. Instead, factors such as rotating shifts, transportation problems, and fatigue offset the competition of the classroom. But this observation is not universally true with all schools or subjects.

Well-educated segments of the population are more likely to want correspondence courses than do the poorly educated. It is reasonable. The well educated know the values of education better, are more literate by definition, and are often in better charge of their study time.

Most marketing of correspondence courses is to individuals. In contrast to the many short courses in Europe, the American correspondence school tries to sell a whole program-often a vocational preparatory curriculum. These full programs requiring a considerable investment can be best sold by a personal approach. Courses sold by mail tend to be shorter and relatively inexpensive. Short courses include many hobby subjects; long courses are almost always vocational training.

Only a few schools try to obtain a complete enrollment by means of an advertisement. Instead advertising is used to stir enough interest to induce a person to send in a coupon or name and address for a free booklet. To tell the whole story in an advertisement is too expensive. Correspondence schools record carefully the source of their inquiries and soon know which magazines have a readership which is most responsive to their advertising.

After an enquiry is received, every effort is made to elicit an enrollment by a series of letters. The percentage of inquiries may be small, but if advertising and conversion of responses into enrollments is sufficiently successful, high volumes of enrollments may be obtained. *Some schools enroll tens of thousands of students in a single subject.* This high volume makes it possible for the school to produce a course of very high quality and provide excellent instructional service.

Mailing lists are also widely used to reach people with a special interest. A magazine about auto mechanics or automobiles may rent its subscription list to a correspondence school with an auto mechanics course. The magazine subscribers receive a letter directly through the mail describing the course and a reply card to use in requesting more information. Several companies specialize in the development and rental of these mailing lists.

Selling correspondence courses to *companies* has long been a growing practice among American correspondence schools. Railroad engineers, firemen, brakemen,and others learn the theory and related information about their work by correspondence while they are employed. They can apply tomorrow what they learn tonight by home study. Hundreds of other business and industrial companies use correspondence courses to train or upgrade their managers, firstline supervisors, technical workers, and others above the unskilled category. Consequently, it is a good practice for a salesman to approach a company, identify its need for training, and show that his school has one or more courses which would help. Once companies are pleased with a course or school, they are likely to enroll a whole sequence of employees over a period of many years. Sometimes, as with the railroads, finishing certain courses may become mandatory within a company for maintaining status or for promotion.

People tend to take more than one correspondence course in a lifetime. They may take a sequence in the same field or study in separate fields--maybe a vocational field and a hobby.

Correspondence study is used rather widely as a means of preparing for a change of occupation. It does not require quitting work to go to school for retraining.

A few very good face-to-face correspondence school salesmen make an excellent living. However, many enter the field and never really learn how to sell the intangible opportunity to study alone. Consequently, the turnover among the inexperienced salesmen is often high.

Dollars and sense: some practical considerations in planning an external studies system

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This is the first of five "dollars and sense" papers on planning an external studies system.

This paper attempts to provide a framework within which four other papers and an integrated discussion session might focus attention on basic considerations facing planners and policy makers charged with the responsibility for developing external degree programmes.

Planning needs to be carried out at three levels: the national or state level, the institutional level, and the faculty level. It is important that political decisions taken at the national or governmental level are influenced by recommendations of educationists who have a professional knowledge of the many educational options available. Otherwise such decisions may lead to the development of inappropriate educational "solutions". Some of the options are suggested.

The final section of this paper describes briefly the development of external studies at the University of New England in New South Wales, Australia, illustrating how an educational philosophy and practical considerations have been reconciled to create an effective distance learning system operating on a national basis. For a more extensive discussion, see "External Studies at the University of New England" by Kevin C. Smith in The System of Distance Education (advance papers of the 10th ICCE conference, Brighton, England. 1975) pp.161-169 inclusive.

Introduction: about this session

The title for this session of the conference is not intended to suggest that distance education (or external studies as it is generally called in Australia) is necessarily an inexpensive way of providing tertiary (college and university) education to the community at large. Rather it is designed to draw attention to some of the fundamental issues to be faced by educational planners and policy makers whose task it is to design and develop the "ideal" external studies scheme from a wide range of options and reconcile this ideal with the realities of economic, political and other constraints.

To illustrate the point, this session has brought together representatives of four other systems of distance education that are quite diverse in terms of educational philosophy, cultural setting, scale of operations, teaching methods and organisational structure and, I imagine, the extent to which claims can be made of having met their objectives. We are fortunate in having on the panel Professor Arthur W. Chickering, recently appointed distinguished professor of higher education and director of the Center for the Study of Higher Education at Memphis State University but formerly associated with Empire State College, United States; Mr. Patrick Guiton, director of the External Studies Unit, Murdoch University, Perth, Western Australia; Mr. Martin Kaunda, director of the Centre for Continuing Education at the University of Zambia in Lusaka, Zambia; and Professor Otto Peters, rector (vice-chancellor) of the Fernuniversität in Hagen, West Germany.

From the papers presented and the ensuing discussions which will include the panelists and "floor members" attending the session, we hope to focus attention on such matters as:

1. Reasons for developing each of the systems to be described.
2. External factors influencing institutional decision-making.
3. Alternative models and the reason for choosing a particular approach.
4. Assessment of the schemes in terms of strengths and weaknesses, costs and benefits.
5. Changes that have been made, or are to be made, to the original blueprint and reasons for these changes.

Planning external studies

Three levels of planning can be readily identified in this context: at the national or state level, by an individual institution and, within that institution, at the faculty level.

1. At the *national or state level,* if we are seeking to provide equal educational opportunities to all sections of society, there are several options open to us. We can, for instance, create a new national institution of the British "open university" type. Or, if there are institutions already offering external studies programmes, encourage them to expand their course offerings and enrolments or create new programmes to fill geographical and other gaps in the network. The network might then be coordinated by a central governmental agency to avoid unnecessary duplication of services, to promote innovation, research and development; and to disseminate information to those interested in availing themselves of study opportunities.

2. At the *institutional level,* there are fundamental questions to be considered in determining the organisational and teaching models to be adopted. The following represent just a few:

(a) For whom will the programmes be designed?

(b) What will be initial scale of operations, the rate of development and the the ultimate or optimum size?

(c) If the institution plans to teach both on and off campus:

  (I) Will internal and external students be studying for the same qualifications?

  (ii) Will the same full-time staff teach both groups? If so, will they teach externals on an overload basis or within their normal teaching load allocation?

  (iii) If different staff are used for externals, how will parity of standards with on-campus courses be demonstrated?

  (iv) How will resources between internal and external teaching be allocated?

  (v) What proportion of total enrolments should externals represent?

(d) If the institution has only external students (as does the Open University):

  (i) Will the course writers teach and assess as well, or will they delegate these functions?

  (ii) To whom will the teaching/assessing function be delegated?

  (iii) How will monitoring of part-time staff be done?

  (iv) How will courses be evaluated objectively to ensure recognition of standards?

3. At the *faculty level,* all kinds of important decisions concerning the choice of methods and media to maintain effective two-way communication between teacher and learner must be taken. The total teaching strategy should evolve after some consideration of such matters as scale, resources available, arrangements for staff-student contact, the costs and benefits of broadcast technology, the provision of counselling services, organisational support structures, the use of study centres, local tutorial assistance and group discussion techniques, to name a few. Once these elements have been determined, their integration should be made systematically in accordance with accepted principles of instructional design.

The external studies scheme at the University of New England, which I represent, is probably typical of the way that a system evolves as a result of combination of factors. In our case, history, geography, politics, personalities, educational philosophy, expediency and pragmatism all played a part in its development. Despite this unlikely mix of motivations, the University is rather proud of its achievements in extending higher education to the community over the last two decades or so. Let us take a brief look at this system and some of the reasons for its developing the way that it has.

The University of New England model: why it evolved the way it did.

The University of New England in New South Wales is a comparatively small university by Australian standards, with a student population of 8,000 of whom 4,300 are externals. It is situated in Armidale, a small country town of 22,000 people, some 350 miles north from Sydney. It is a residential university which provides on-campus college accommodation for half of its internal students.

The essential characteristic of the New England scheme, the largest tertiary scheme of its kind in Australia, it is that *external and internal teaching are integrated. The same full-time staff teach and assess both sets of students who are enrolled, for the most part, in the same courses.* They take the same examinations at the same time as internal students, in examination centres across the continent. Ultimately, they qualify for the same degrees and diplomas.

Recently our University reviewed its approach to external studies after twenty years of operation. It reaffirmed its belief in an integrated approach to teaching external and internal students, notwithstanding differences between them of motivation, maturity, and pressure of outside commitments. This philosophy was summed up in the following recommendations:

(a) degrees should not be obtained entirely by correspondence methods.

(b) the University should provide a learning experience that involves interaction of the student, not only with his source material, but also with other students and his teachers.

(c) notwithstanding these recommendations, external courses should be designed to take into account the independent learning situation of external students.

The basis of the external teaching strategy at New England is the correspondence element consisting of original material written by course authors, study guides, reading lists, supplementary reading material, advisory "letters", work books and assignments. These are compiled by the academic staff, but the printing, collating and distribution is the responsibility of the director of external studies. In many cases, especially language and music courses, audio tapes are integrated with the correspondence material. Audio-visual kits consisting of cassettes, coloured slides, rock and soil samples, maps and study directives have also been used at study centres established for the purpose in several towns throughout the state. A special collection of reference books and articles is held in multiple copies in the University Library for borrowing by mail.

The development of close staff-student relationships is encouraged mainly through *compulsory residential schools on-campus. Voluntary weekend schools are also held* at the University and other centres and visits are made to students by academic staff and senior officers of the Department of External Studies. Students are also encouraged to set up discussion groups where possible. Within this framework, a variety of teaching methods and supportive services have been effectively developed. Co-ordination of the scheme in the organisational sense is the responsibility of the director of external studies.

Certain questions need to be asked. Why has the New England system of external studies developed the way that it has? Why the emphasis on exposing external students to learning experiences akin to those of full time internal students?

I believe that there are two answers to this. First and foremost is *the principle of parity of standards.* In the 1950's when U.N.E. entered the field, external studies as a learning mode was not regarded highly, neither by our universities nor by the community at large. It was claimed by many to be wasteful, inefficient and second-rate. New England, by its policy of integration of two learning modes, through the performance of its external students compared to internals, and by insisting upon regular direct interaction of students and staff, was able to demonstrate that the general quality of the teaching-learning process was impaired but little, if at all, by distance.

Secondly, we believe strongly that there should be more to a university degree than satisfying examiners' requirements. Elusive though the 'true university experience' may be to define, *there is no doubt in the minds of our staff and students that without some interaction on a face-to-face basis, off-campus education is the poorer.* Both teacher and learner need to feel commitment to their respective tasks to do them best. Such commitment is difficult to engender without opportunities for staff and students to meet on a regular basis.

It was fortuitous that this educational philosophy could be implemented in a practical way, because the *University of New England was, from its inception, a residential institution which could accommodate externals on campus during vacation periods.* Indeed, it was in the interests of the University to utilise its facilities on a year-round basis in this way. Some have argued that insistence on residential attendance once or twice a year reduces flexibility of learning and may inhibit enrolment for many potential students. If this is the case, there is not much evidence to support the claim because we receive too many applications every year for the places that are available (about 4,500) and many are from other states.

There are many other "cause and effect" relationships that explain the evolution of the New England model. For example, the decision to accept a significant commitment to an external studies scheme in 1955, when such a venture was confined to one university (Queensland) and had been so for 44 years, cannot be divorced from the fact that our first Vice-Chancellor, Sir Robert Madgwick, had a deep and genuine faith in the concept of continuing education, having been officer-in-charge of Army Education in Australia during World War II. Philosophy aside, the rural situation of the embryonic university might have meant a slow economic growth if all its students had to be campus residents. Pragmatism played its part!

Yet again, the choice of teaching methods has been made with as much regard to the realities of demography and technology as educational philosopy. Television and radio, for example, have not been used because of small classes spread thinly over vast areas and limited broadcast facilities available through the Australian Broadcasting Commission. For similar reasons, a complex network of study centres and local tutorial assistance is not feasible because 300 different course units shared among 4,500 students, many of whom reside in small country centres, inhibits the formation of groups that can interact fruitfully and continuously in a common subject area.

Conclusion

U.N.E. provides but one illustration of how to plan an external studies system. The papers of the four other panelists and discussion during the conference session itself will, I hope, take us further in examining the options available to planners of external studies schemes and bring into sharper focus the important considerations that help to determine the shape that a particular option will ultimately assume.

Dollars and sense:

Distance education for
1 million square miles
of Western Australia

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This is the second of five "dollars and sense" papers on planning an external studies system.

Australia has long been faced with the problem of how to give reality to decentralisation. This paper focuses on Western Australia with its small (1.1 million) and highly centralised population (75% in the metropolitan area of Perth/Fremantle). It points to some of the ways in which the development of distance education is proving a practical and economical way of spreading the resources of the colleges and universities to a wider and more varied student body.

Despite government recognition of the advantages of decentralisation, Western Australia's second new university was recently established in the Perth metropolitan area alongside the state's six other teritiary institutions (colleges and universities). Since Western Australia has no other centre with more than 25,000 inhabitants, this decision was both inevitable and rational, but it emphasised the problem of providing tertiary education throughout this huge, sparsely settled territory.

A requirement that secondary school graduates should "come to the city to college" has been accepted perhaps more readily by the graduates than by their parents. It is significant that in 50 years the University of Western Australia never enrolled more than 400 of its 10,000 students as "externals".

It was only with the establishment of the Western Australian Institute of Technology in 1967 that "external studies" was systematically introduced with particular emphasis being given to business studies and accountancy. For the first time small businessmen in the country and employees of state-wide industries and services in rural centres could undertake home-study to further their careers - and, perhaps, to hasten their recall to the city.

When Murdoch University was planned in the early 1970s it had as its educational objectives:

- "to make an enduring effort to seek ways in which the University and the community may derive mutual benefit from the fostering of a close relationship"
- "to open opportunities to benefit from a university experience to those who are, or who have been, disadvantaged by an inability to participate in a regular programme of university studies".

Appropriately enough, one of the main ways of meeting these objectives was seen to be through distance education, particularly correspondence courses for credit towards the University's bachelor degree and postgraduate diploma of education. Degree programmes were developed progressively in history, economics, mathematics, world literature, general studies and teacher education. A start has been made in courses in physics and mineral science.

The following are some of the organisational and educational principles which have influenced the development of Murdoch's external studies programmes over the University's first three teaching years.

1. Teaching externally

Attending and distance students take courses of study based on identical course objectives, but the courses are prepared so as to meet their separate needs. Course preparation and tutoring for both modes of study are undertaken by members of the academic staff of the University's schools. They are able to gather and interchange the learning experiences of attending and distance students. The University has established an external studies unit which has both academic and administrative responsibility. Education Officers, themselves members of the University's academic teaching staff and experienced in distance teaching, work with other academic staff as consultants on course design. Administrative staff arrange for the co-ordination and dispatch of correspondence materials (printed and audio-visual) and the interchange of course assignments.

In an intregrated teaching system, how are academic staff, who prepare their courses in two different modes, compensated for the additional preparation time involved? In some institutions staff are paid on an "overload" basis, but at Murdoch we have preferred to develop a system of allowances against academic staff teaching workloads.

The director and members of the academic staff of the external studies unit and of the educational services and teaching resources unit plan and conduct regular meetings at which experiences are shared.

2. Modes of study

Traditionally, external studies in Australia has been regarded as a way of providing a substitute education for the geographically disadvantaged. Metropolitan residents have often been asked to show special cause why they should be permitted to study at distance rather than by attendance at lectures and tutorials. However, there is increasing recognition of the fact that geographical distance is only one among a number of "disadvantages"; occupational demands, physical disability, pre-school children, and timetable clashes are others. At Murdoch this has meant that we have defined "external" as a preferred mode of independent study rather that a specific category of student. *In 1977, 30% of all the University's undergraduates were taking one or more* *semester courses by the external mode. Some such enrolments are the result of "disadvantage": others are the result of students selecting independent study.*

3. Self-paced study

Distance education and the semester system are ill-matched. Postal delays and short term complications in the students' occupational or domestic commitments can all too easily result in a discouraging, or indeed an irretrievable loss, ot study pace. At the start of each semester course, external students at Murdoch are given a choice between a 1-semester and a 2-semester pace. Although there seems to be no appreciable difference in course completion rates between the two differently paced groups, the opportunity to make a decision on study pace reinforces students' determination to complete a course.

4. Support services

In 1978 there are approximately 850 people taking University external studies in Western Australia. Approximately 500 of these are country residents thinly distributed across 1 million square miles. In these circumstances, *it is essential to start from the principle that courses are first prepared for individual students working independently at home. Then we see if it is possible to provide support tutorials, localised library and study centre facilities.* In planning support services and visits to country areas, Murdoch University and Western Australian Institute of Technology have worked closely together, sharing the costs of staff travel, the hire of light aircraft and premises for orientation meetings and part-time regional co-ordinators. Joint publications outlining the range of courses and programmes available from each institution are produced and prospective students counselled on how to select from among that range.

5. Community learing

A Murdoch student planning to take an entire B.A. degree by external study will normally take from 5 to 8 years to complete it. But we have found increasing numbers of potential students anxious to undertake college study without necessarily committing themselves to a full degree programme. Efforts have been made to meet their educational needs in two ways.

Provision exists for students to enrol in one or more selected semester courses: for example, a secondary school teacher trained overseas in English history is now anxious to teach Australian and South East Asian history. We have also tapped localised educational resources in isolated (but technologically sophisticated) parts of the state for the development of college extension courses. An example of this is "The Man-Made World", a 26 week multi-media course about technology and its social and economic interfaces. Originally developed by the (British) Open University, the course has been adapted to the needs of people in the iron ore mining communities of the Pilbara region in North Western Australia. This project is financed by the Hamersley and Mount

Newman Mining companies, organised and tutored by professional employees in the mining industry, and co-ordinated and underwritten by Murdoch University academic staff. Other extension courses have made use of the radio facilities of Western Australia's Royal Flying Doctor Service to link students on widely separated pastoral stations.

In its report "Open Tertiary Education in Australia" (1975), the Karmel Committee stated its belief *"that tertiary courses should be available to Australians wherever they live and in whatever circumstances they are placed."* This paper has pointed to one or two ways in which this formidable challenge is being approached.

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Dollars and sense at Empire State College, State University of New York

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This is the third in a series of five "dollars and sense" papers on planning an external studies system.

Empire State College, founded in 1971, is a unit of the State University of New York offering associate and bachelor's degrees in arts and sciences. It features individualized degree programs that draw on diverse resources: internships, study at other colleges, independent study, correspondence work, media-related instruction, tutorials, etc. Each student designs a degree program within the framework of both college and individual goals. This may be in a traditional discipline, problem area, or interdisciplinary study, in nine broad subject areas. Contracted studies between mentors faculty and students are the "building blocks" for completing degree programs. Credit also may be granted for prior learning from formal, nonformal, and informal educational experiences.

Admission is open to any high school graduate and selected others on a space available basis. The average age of students is 37: they are about equally divided by sex, 40% study full time, 60% half time.

Regional Learning Centres have a dean, an associate dean, and mentors covering a variety of disciplines. Mentors help students develop programs and identify available learning resources. They are assisted by adjunct and part-time tutors drawn from other institutions and community specialists.

Empire State College, State University of New York was created by the State University board of trustees in Spring 1971, to develop alternative approaches to higher education, building upon the existing strengths and resources of the entire State Unversity system. It had four central purposes: (1) *Access: To respond to the human social circumstances of persons, to the need for flexibility of time and place, so that people previously unable or unwilling to attend a campus regularly could pursue an education. (2) Content:* To meet the educational needs and purposes of diverse students and to help each student plan a study program selected from many alternatives. (3) *Method:* To evaluate and utilize learning wherever it occurs, and develop such processes and resources as are necessary to respond flexibly to individual students in many locations. (4) *Cost/Effectiveness:* To conduct research on these alternative models.

The range of areas for which students may develop study plans include opportunities in education and business; the broad range of opportunities in the liberal arts and sciences, especially interdisciplinary and problem-oriented areas; career ladder opportunities in the applied sciences; community services, and certain allied health programs. The faculty include full-time and part-time mentors, part-time adjunct or community faculty, and tutors, field-supervisors, and non-teaching professionals. All work directly with students or with the development of learning resources for students.

Substantial numbers of students come from other than academic backgrounds, and many of them continue to pursue their principal professional or vacational employment and interests while contributing significantly to the College.

The learning resources available for students include human resources, courses offered by other institutions and organizations, opportunities for field experiences, independent study and modular learning materials. The students, the faculty, and the learning resources they use, are dispersed throughout the state and at other strategic locations through a network of learning centres, units, mentors-on-location, and cooperative relationships with other institutions and organizations.

The college offers Associate of Arts, Associate of Science, Bachelor of Science and Bachelor of Professional Studies degrees. With minor exceptions, all students are degree candidates. The College has defined nine areas of inquiry within which it organizes resources and plans individual degree programs. Within the nine areas the student has great flexibility to design, with faculty advice and consent, a degree program that suits his or her background, interests, and goals. When the degree program is prepared and approved by faculty action, it becomes the basis on which learning contracts are built and requests for advanced standing for prior learning are founded.

All credit-earning work done at the College is through learning contracts. These contracts can include a variety of approaches to learning, such as independent study, tutorials, courses taken at other institutions, internship experiences, and the like. Learning activities must be adequately described, methods and criteria of evaluation must be given, and the entire contract must be approved and signed by the student, the faculty mentor, and the associate dean of the learning center.

Bachelor degrees require 32 months of full-time study or the equivalent. Associate degrees require 16 months of full-time study or the equivalent. Students may pursue either full-time or half-time study. One-quarter time study is available in certain circumstances.

The admissions process is designed to encourage self-selection by potential students, who submit a prospectus in which they describe their goals, interests and background, and reflect on the suitability to them of the Empire State program. Through the prospectus, potential students are led to consider whether they have the motivation and self-discipline necessary to succeed at Empire State College.

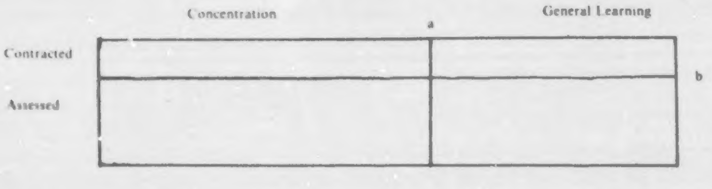
The prospectus makes it clear that if the College cannot help the student achieve his specific objectives, the College may deny him admission.

The College grants advanced standing toward its several degrees in recognition of prior learning. *Each student prepares a degree program and also a portfolio of prior learning which analyzes learning experiences for which advanced standing is sought, relates them to the overall degree program and provides evidence that the learning did indeed take place.* Advanced standing is recommended by the faculty review committee in the learning center and recommendations are reviewed by the Office of Program Review and Assessment and the Vice President for Academic Affairs before being finally approved.

The Office of Program Review and Assessment assists in the process by thoroughly checking the portfolios for completeness and conformity to college standards and also by abstracting guidelines from learning center review committee actions and circulating these thoughout the College, and further by informing the centres of the availability of evaluative devices.

Three key elements enable the student to meet the College's educational expectations: the degree program, assessment of prior learning, and the learning contract.

The following diagram shows the framework for degree programs.



As the diagram suggests, a degree program may contain work toward the concentration and general learning done under learning contract, and assessed prior learning credited toward the concentration and toward general learning. Some students may include no assessed prior learning in their degree programs. *All degree programs, however, include a concentration and general learning. Likewise, all degree programs include some learning done under contract.* The degree program, therefore, is the key element which brings the student's purposes and prior learning into relationships with the College objectives and degree requirements. It provides the framework against which advanced standing decisions are made and within which individual contracts are planned.

Each degree program requires both a *concentration* of learning within a sharply defined context and *general learning* that supports the concentration and provides for breadth of education. The proportion of a degree program required to develop the competencies called for by particular concentrations will depend upon many factors, including the student's goals, background, and initial levels of competence, as these relate to the intellectual requirements of the modes and areas of study pursued. Students whose degree programs fall within certain frameworks may find that, in contrast to other students, external requirements may limit or determine certain aspects of their studies.

Associate degree programs may emphasize general learnings to establish a base for future concentration and a limited opportunity for concentration, while bachelor degrees emphasize depth of concentration from a broad base of general learning. With this in mind, associate degree programs are constructed within the same areas of study as bachelor degrees. Associate degree programs are expected to encompass the same intellectual competencies as in bachelor degree programs. The learnings that satisfy the degree requirements, both in concentration and general learning, may take place while a student is enrolled in the College, or they may be recognized through the process of assessment of prior learning to have been achieved before the student enrolled in the College. *When a concentration is recognized to have been largely completed prior to enrolling in the College, the degree program will require emphasis on broadening general learning through liberal studies.*

An entering student's status is determined by the preparaton of a portfolio of prior learning, in which a case is made for a given number of months of advanced standing, determined by the competencies acquired in traditional higher educational settings or elsewhere. The portfolio is typically assessed in light of the student's individual degree program, which is created by harmonizing *three principal elements.*

The first element is always the student's goals, capacities, and aspirations. Each student takes the initiative to design a program which responds seriously and concretely to these factors. Since the student takes a major responsibility for learning, this first element is a fundamental and essential part of an effective degree program.

Each student is also expected to demonstrate achievement in the broad areas of intellectual competence and personal development which constitute the Empire State College degree expectations, the second element addressed by a degree program. These degree expectations are met by engaging in several modes of learning (the third element) in those areas of study in which the College has approved programs, experienced faculty, appropriate inter-institutional relationships, and adequate learning resources.

The blending of individual purposes with degree requirements and institutional resources ensures individual degree programs which meet normal expectations for college level study. That blending occurs as each student develops and gains approval for a program and as the work carried out in that program is reviewed and evaluated for degree recommendations.

Attached tables 1 and 2 present general information about costs and expenditure ratios. *They show basically that this individualized approach, using diverse resources, can be carried out at instructional costs similar to those of other comparable colleges within the State University of New York. However, significant savings occur in non-instructional portions of the budget.*

EMPIRE STATE COLLEGE EXPENDITURES BY FUNCTION (1971-2 THROUGH 1975-6)

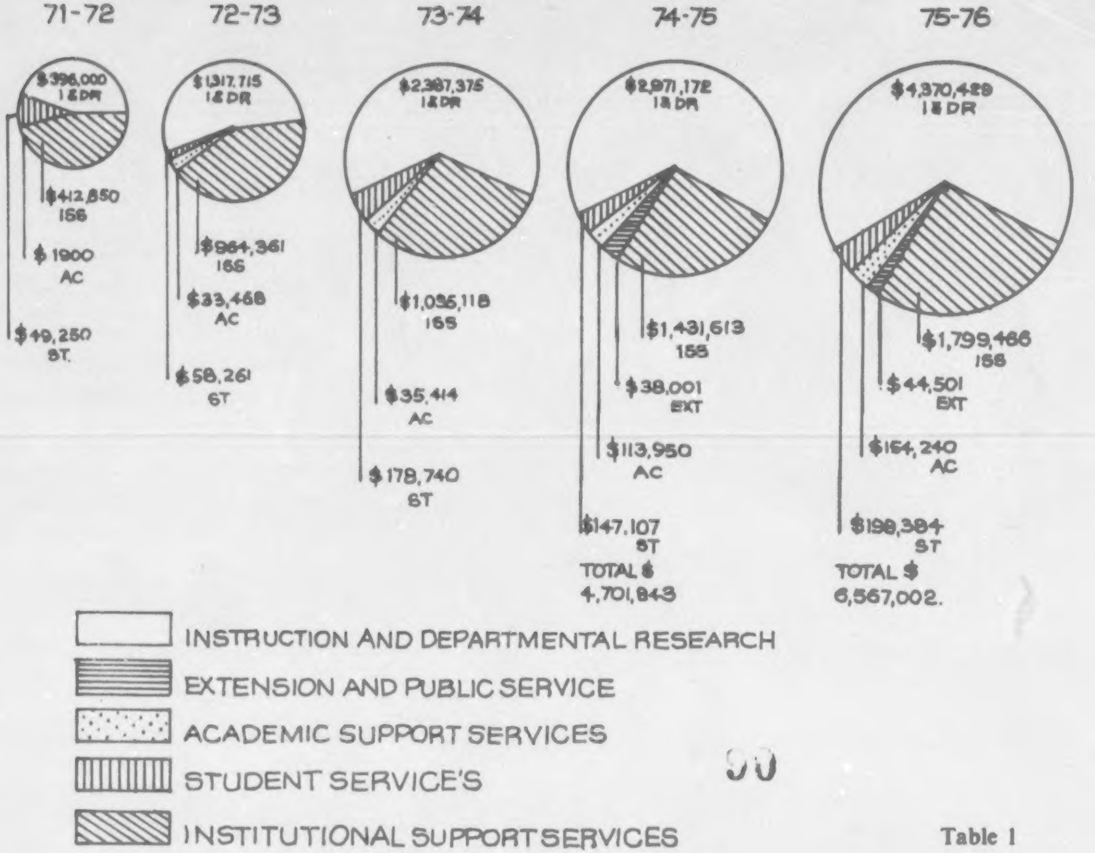


Table 1

Table 2

COMPARISON OF PROJECTED (1974-76) $ COST PER 9 MONTH FULL TIME EQUIVALENT STUDENT*

EMPIRE STATE COLLEGE COMPARED WITH OTHER STATE UNIVERSITY OF NEW YORK EMERGING AND FOUR YEAR COLLEGES

	EMPIRE STATE COLLEGE		EMERGING COLLEGES				FOUR YEAR COLLEGES								
	1974-75	1975-76	1974-75				1974-75								
TOTAL	1880	1791	3605	3698	2214	1913	1999	2131	2048	2040	2087	2032	1969	2105	2267
Instruction and Departmental Research	1188	1192	1325	1545	942	1153	1159	1125	1079	1135	1192	1130	1088	1118	1132
Organized Research							5	8	56				8	9	
Extension and Public Service	15	12		19		10	5	5	15	8	25		4	21	29
Academic Support Services	45	42	313	414	346	97	110	126	128	129	115	149	124	130	172
Student Affairs and Student Aid Services	59	54	329	316	195	134	144	140	132	171	150	147	144	134	158
Institutional Support Services	573	491	1638	1404	731	519	576	727	638	597	605	606	601	693	776

* Two half time students are equivalent to one full-time student

Dollars and sense at the Fernuniversität

Dr. Otto Peters, Fernuniversität
(Federal Republic of Germany)

This is the fourth of five "dollars and sense" papers on planning an external studies system.

Here we have some basic information about the philosophy, the objectives, the teaching-learning system and some of the problems of the Fernuniversitat -- a distance learning university established in 1974 in Hagen, North-Rhine-Westfalia, Federal Republic of Germany.

The paper which follows should stimulate considerable discussion about the problems facing policy makers and planners intending to found new distance study institutions at the college and university level.

Some of the problems are: Which traditional structures, if any, are suitable for distance learning? Is it better to start on a small or large scale? Academic standards versus innovation? Open access or not? New curricula for a new type of student? Should television be included or not? What is the real function of the study centre? What is the function of foundation courses? Looking to the future, what should be done about inservice training by correspondence for members of the academic profession?

Introduction

The Fernuniversität in Hagen was founded in December 1974 by the state government of North-Rhine-Westphalia in the Federal Republic of Germany. It was opened in October 1975. At the beginning of its third year the Fernuniversität served more than 11,600 students in the faculties of mathematics, economics and education.

Meanwhile, plans have been decided upon by the government to expand the teaching program of the Fernuniversität. Within the next months and years, the following new faculties will be established:

- *Engineering and natural sciences*
  Computer science, electronics, chemistry, physics and biology
- *Social sciences*
  Sociology, psychology, political sciences
- *Arts*
  History, Literature, Philosophy

- *Law*
  Training for teachers of law at secondary schools. Special in-service-training courses.

It is a guiding principle of these faculties to develop curricula for undergraduate and postgraduate studies and integrate them with courses for further (or adult) education. The faculty especially desire to help people working in the academic professions. Consequently the number of students will increase considerably in the years to come.

The Fernuniversität serves four types of students

		roughly:
(1)	full time students	(10%)
(2)	part time students	(46%)
(3)	course students	(35%)
(4)	full time students enrolled at other universities	(9%)

The status of our university and its faculties is legally the same as that of traditional universities. And as the regulations for our examinations must be approved by the ministry (according to national regulations), our students qualify for diplomas and degrees as students do in other universities.

We do hope that the Fernuniversität will develop into a new type of university, tackling some of the problems the traditional universities cannot cope with.

1. How did the Fernuniversität emerge?

Other schemes of introducing a comprehensive distance study system at the college and university level in the Federal Republic had failed or had been postponed again and again due to political difficulties in our federal-state system. Finally the government of one state of the Federal Republic-North-Rhine-Westphalia decided to set up a new university of its own which would be devoted solely to distance teaching.

The *objectives* of the new institution are

- to help the other universities which already have more students that they can serve adequately.
- to promote the reform of teaching and learning.
- to set up a new system of further education especially for people working in the academic professions.

The *target groups* are, generally speaking, those people who always wanted to obtain a degree or diploma but could not do so for economic, social, family, health, or geographic reasons.

2. Why was our model adopted?

The planning group in the Ministry of Higher Education of North-Rhine-Westphalia had analysed German experiments and models in other countries and decided that, under the political framework and socio-economic conditions in our country, it would be best to found *a new university* devoted to distance study alone. That is, the Fernuniversität was planned and developed exclusively for teaching *external* students as, for instance, is the (British) Open University, the University of South Africa (UNISA) and a number of technical distance colleges in the USSR. The decision was taken to avoid many difficulties and problems which arise when the teaching and administrative staff of traditional universities are confronted with new types of students, new methods of teaching, new media, and new organisational set ups. The planners felt that the teaching and the administrative staff should be able to devote all their ability, knowledge, time and organisational capacity to solve the very special problems of external students.

Another reason for founding a university for distance studies was that, *in our country, the traditional universities had always been very reluctant to develop special courses for further and adult education.* Since this, however, was to be one of the main objectives of the Fernuniversität, many planners believed that a fresh start with a new type of university would be advantageous.

3. The teaching-learning system

The basic philosophy of the Fernuniversität is that tertiary (college and university) education in a highly industrialized country must employ *technical media* and *organizational methods* in order to make university teaching available to those persons who have not been able to attend universities.

Starting in this way the Fernuniversität developed a comprehensive and differentiated teaching-learning system. It consists of the following five main elements:

(1) *printed material* (courses, reading material, study guides etc.), sent to the students 17 times a year. It is supplemented by audio-tapes, video-tapes and other audiovisual material.

(2) *A special service for reading, correcting and marking the papers* which students send in up to eight times per course per year.

(3) *36 study centres* where students can meet and interact with other students and with the staff.

(4) A *tutorial service* by mail and telphone.

(5) *Study days* (e.g. compulsory seminars conducted in the second and third years).

We do not believe that we should integrate the learning modes of internal and external students, but rather develop the specific five elements of our distance study system to the fullest. In so doing we hope to meet the needs of our students. These needs differ from those of students in the traditional universities.

4. **Students:** statistical outline, December 1977

11,619 students

Sex		
female	2,135	18.4%
male	9,484	81.6%
Living area		
North-Rhine-Westfalia	6,088	52.4%
Other states of Fed. Rep.	5,275	45.4%
Abroad	175	1.4%
Age groups		
18 - 24	3,046	26.2%
25 - 31	4,459	38.4%
32 - 38	2,670	23.0%
39 - 45	858	7.4%
46 - 52	336	2.9%
older than 52	197	1.7%

Faculty and student types

student type	Mathematics	Economics	Education	Total
full time	198	865	84	1,147
part-time	1,203	3,789	317	5,309
course student	877	2,486	763	4,126
Full time student at other university	295	547	192	1,037
Total	2,573	7,687	1,356	11,619

University entrance qualification		
General university entrance qualification (Abitur*)	7,751	66.7%
University entrance qualification restricted to one faculty	432	3.7%
Technical college entrance qualification	1,578	13.6%
Without entrance qualification	1,858	16.0%
Total	11,619	100.0%

5. Assessment: strengths and weaknesses

The Fernuniversität has attracted heavy enrollments in a short time. Although we so far have offered courses in mathematics, economics and education only, enrollments rose from 1,300 in the first year to 5,600 in the second and 11,600 in the third year. The enrollments increased to more than double the number that had been planned for!

The strength of the system lies in the distance study courses which have been developed carefully by the faculties and which are of a very high academic standard.

A weakness of the system is that many study centres are not well attended by the students and in some states it has been impossible to establish study centres.

Another weakness is that the anticipated cooperation with radio and television corporations has not yet been realized.

Furthermore, there is the necessity of restricting access to those students with university entrance qualifications. Only students taking an individual course may enrol without having these qualifications. *This is necessary because of the principle of parity of standards. Our students who wish to change over to other universities must be acceptable with regard to their university entrance qualifications.*

Another weakness of the systems lies in the necessity to merge a *traditional system* of research and teaching and a *technological system* of disseminating knowledge. There are many principles, experiences, customs, necessities and pressures which will not easily fit together.

6. A major change

We did not set up a central institute for running our study centres, but commissioned the various faculties and our administration to do this job.

7. **What changes would I make if we could start all over again?**

If conditions had been more favourable I would have started with 25,000 students instead of 1,300 students.

8. **The most important issues**

- A distance study system must be geared to the needs of the students. Since they are adult, working for a living, and engaged in family and social life, they are a new type of student. Developing curricula for them, therefore, means breaking away from traditional curricula developed mainly for younger students. We must create something new! This, however, has proven to be very difficult. *Quite often trying something new in this area is considered as lowering the academic standards.*

- Since the students come from many walks of life, it is necessary to equalize their knowledge before entering a given course by developing special *foundation courses.*

  It is, indeed, necessary not to lower the academic standards. Lower standards would be unfair to the students who have to undergo many hardships in obtaining a degree or diploma. If the degree and diploma is not recognized fully in the labour market or by other groups of society, all the hard work of many years may have been in vain.

9. **Costs**

Tuition is entirely free as is the case at all other universities in Germany.

New universities of the traditional type as a rule spend hundreds of millions of marks and need many years of preparation before the first group of students start studying. But three years after Parliament passed the law founding the Fernuniversität, we served more than 11,000 students. Our modest budget for each year is shown below.

1975	9.5 million German mark
1976	19.9 million German marks
1977	32 million German marks
1978	39 million German marks

Correspondence courses in India

Some problems & future needs

Bakhshish Singh,
Punjabi University
(India)

This is the first in the series of papers of the All India panel.

Correspondence courses in the developing countries such as India must play a wider role; the courses should not be for college students only.

There should be a comprehensive survey of the educational needs of society (in India) and careful planning as to what courses should be offered. Some vocational courses are needed.

Certain organizational changes are urgently needed: a separate faculty of correspondence education in the universities, backed by a National Institute; or some correspondence institutes should be converted to open universities.

The teaching faculty of the institutes must be strengthened through in-service training and retraining.... Correspondence teachers must have greater prestige.

A national correspondence syllabus would ensure better standards and the economic viability of correspondence courses.

Lesson-writing needs rethinking. The idea of providing lessons in the form of guidelines shows lack of practical thinking. Radio/TV, other mass communication media, and audiovisual aids should be used more often to supplement written instruction.

Correspondence courses in India provide an alternative and economical method of education for a large number of persons. The courses are intended to serve (a) students who had to discontinue their formal education owing to pecuniary and other circumstances; (b) students in geographically remote areas (c) students who discontinue education because of lack of aptitude and motivation but who later on become motivated (d) students who could not "find a seat" or did not wish to attend regular college classes, although they had the necessary qualifications.

The Union Ministry of Education and the University Grants Commission (UGC) decided in favour of correspondence courses in order to cope with the ever-increasing demand for education and the social necessity of providing equal educational opportunities to all sectors of society in a democracy.

Present position and achievement

So far, correspondence courses in India have served largely as an extension of traditional college and university education, although some universities have started job-oriented vocational courses.

Correspondence courses in our country have also helped in equalising opportunities for higher education, thereby administering "justice in arrears" to the hitherto neglected sections of society. The scheme has also proved a boon for employed people who could not otherwise improve their academic qualifications. It has also brought relief to the public treasuries in that it is a comparatively economical method of providing higher education to a large body of students.

A new approach needed

Educators in developing countries such as India now feel that education has to play a wider role in response to social pressures and national requirements. This demands a restructuring of the *content* of education as well as the *method* of imparting education. We need built-in flexibility to adapt from time to time, to new trends and newer demands.

The old concept of higher education must yield to a pragmatic concept which should impart both general education and practical skills. Even in advanced countries such as the USA, community colleges have sprung up to cater to the over-all educational needs of the communities around. Obviously there is greater need of this type of education in the developing countries.

Governments and correspondence educators in developing countries should give serious thought to providing correspondence education which will adequately respond to the changing aspirations and needs of society. *With the tremendous pace at which knowledge is growing, the content of our educational courses will probably become obsolete quicker than the methods.* We must also note new trends, new thinking, new values, new culture and the latest changes in the expectations of learners.

Above all, we must realize that *education in the future will have to be a life-long process.* The educational imbalance between those who live in the villages and those who live in the towns, between men and women, and between the rich and the poor must also be rectified. The new educational system should also improve education for women, particularly in the rural areas where parents are reluctant to send their daughters to co-educational institutions or distant colleges.

Correspondence course must not be tied down to the traditional college or university patterns. Even within the traditional college, subjects of vocational interest should be included. Students should have a wide choice of subjects relevant to their needs: for example, Office Management, Secretarial Practices, Accountancy, Business Management, Banking, Radio, Television Technology etc.

Correspondence courses in a variety of subjects should help the nation to achieve universal literacy, to benefit for compulsary schooling, and to improve the skills of people already employed in vocations. We should therefore, give serious thought to broadening our range of subjects to meet our national requirements.

Correspondence Institutes in the USSR, USA, Sweden, and a number of other advanced countries have tried this idea with great success. They offer a wide variety of job-oriented, vocational and hobby courses which give a new direction to their educational structure. It would be of immense help to the developing countries to introduce some such courses.

Meeting the needs of a changing clientele

A good deal of planning will be required to implement this idea. The first step is a comprehensive survey to assess the needs for different types of courses. This survey should be conducted in India at the central as well as the state level. The Ministry of Education and the University Grants Commission should asssist in these surveys since formulating different types of courses is relevant to the needs of society and national development.

The enrolment statistics of the correspondence courses institutes in India indicate that within a few years after courses in a particular region are started the back-log of those who could not go on to higher education cleared up to a large extent. Now younger streams of students, generally the overflow from colleges or universities, or those who want to learn and earn simultaneously, have started joining correspondence courses.

These students have different aspirations and goals. This change of clientele calls for quick adaptability on the part of correspondence courses institutes to new demands, and flexibility in evolving different types of courses.

Correspondence courses institutes should not hesitate to discard courses which have outlived their utility, and to adopt instead new courses which may be in great demand.

Needs for status and autonomy

However, correspondence courses institutes, constituted as they are today,are hardly equipped to accomplish this task. Only an autonomous institute can meet such a challenge to keep on adapting itself to the ever-changing demands in the field of education. And probably the solution lies either in (a) setting up a National Institute of Correspondence Education to lay down policies, conduct research, and guide correspondence courses institutes in developing different types of courses, or in (b) converting some of the correspondence courses institutes into open universities. An immediate step in this direction could be the establishment of a separate faculty of correspondence education in the Universities which have institutes of correspondence courses.

The success of an educational institution will, to a large extent, depend upon its teaching faculty. And this becomes all the more important for a correspondence courses institute which has to continuously engage itself in devising new courses and methods of instruction. These institutes must, therefore, have strong and independent teaching faculty. The directors/principals and correspondence course teachers, irrespective of their titles, should be treated at par with university professors, readers and lecturers in matters of pay and privileges. The terms and conditions of correspondence service should be made more congenial so that talented teachers may not feel disadvantaged while working in correspondence courses institutes.

The U.G.C. in their guidelines for postgraduate correspondence courses has stipulated that the academic responsibility for these courses would be that of the university teaching departments concerned. This has two basic snags which have proved to be serious obstacles in the successful implementation of this scheme. First, most of the academicians in the university teaching departments do not have faith in the correspondence method of teaching. Secondly, this type of arrangement will mean dual control which is more likely to create problems than solve them. The U.G.C. standing committee for part-time and own-time education has, however, recommended modification of this guideline to ensure necessary collaboration between the correspondence courses institutes and the university teaching departments.

The main reason for entrusting academic responsibility to the teaching departments is to ensure standards. This could probably be better achieved by allowing the correspondence courses institutes to have a strong faculty though not a very extensive one, because most of the work pertaining to lesson-writing and evaluation of student responses could be done on a fee payment basis by some of the best available talent in the universities. But we must make sure that some heads of the teaching departments do not get rid of problem teachers by referring them to the correspondence course institutes.

Training of correspondence teachers

Correspondence course institutes should provide the in-service and retraining of teachers in the major aspects of correspondence education. It would be helpful if a research and evaluation unit is established in correspondence courses institutes to evaluate the success or failure of different parts of the instructional programme. The result of such an evaluation would help the research unit to develop new and innovative methods of imparting instruction.

Intensive workshops, seminars and summer courses should also be organised to acquaint teachers with the latest methodology and techniques of lesson-writing, editing, formulation of different types of questions for students, evaluation of students' responses, teaching at personal contact programmes, writing of radio scripts and television programmes and the use of audio-visual aids and the media. Teachers should be sent on study leave for research or higher studies. They should be encouraged to participate in conferences and seminars on subjects of their respective specialisations. The success or failure of correspondence courses to a large extent depends upon the calibre and dedication of the teachers (whether regular, whole-time or part time), the authors who write courses, and all others who reach students either face to face or through the media.

Need for national syllabus

Should all the correspondence courses institutes in India follow a national syllabus which may be worked out by top academicians of national repute? This would enable the institutes to pool their resources and eliminate avoidable expenditure now being incurred by the various institutes. It would also ensure quality of course material and facilitate migration of students from one institute to another. The experiment has been tried with great success in the USSR. It should be particularly useful for the developing countries which have limited financial resources.

Need for improvement in lesson writing

Lesson-writing in most universities is fairly satisfactory, but further improvememts could be effected by using course teams for the preparation of lessons. The lesson may initially be written by one teacher but it should be subjected to thorough scrutiny by a course team comprising specialists in the subject concerned.

Objectives of the lessons must be clearly defined and the age group and comprehension level of the student body kept in mind while preparing the lessons. Specialists in editing and production and experts in audio-visual media should also be consulted to ensure proper layout, illustration and get-up of lessons and audio-visual support wherever it may be necessary to supplement instruction contained in the lessons.

Steps should also be taken by the correspondence courses institutes to set up review teams which should assess the lessons periodically, taking into account the students' assimilation on the basis of feed-back provided by them in the form of response sheets, etc. The review teams should also ensure updating of the lesson content wherever necessary.

The U.G.C. suggestion that course material at the postgraduate level should be in the nature of guidelines needs *reconsideration*. This suggestion betrays lack of a realistic assessment of the needs of correspondence courses students and a fear in the minds of university teachers that if comprehensive lessons are prepared at the postgraduate level, it might encourage regular students to skip classes because they would prefer to rely on the lessons which they might manage to get from their fellow students in correspondence courses institutes. Obviously this might pose a challenge to teachers in the college or university teaching departments. But teachers who can "deliver the goods" do not need to worry about attracting students. If a teacher does not come up to standard, the students are justified if they do not attend his classes.

The idea of providing lessons in the nature of guidelines also shows lack of practical thinking because we cannot shut our eyes to the fact that a substantial number of correspondence students are scattered at places where there are hardly any good library facilities within their easy reach. If we cannot provide proper library and counselling centres or tutorial services at different places within the easy reach of students, we must provide them with fairly comprehensive lessons. We must suggest independent reading to supplement instruction imparted through the lessons, but we should also supply a package of reference material wherever appropriate.

Very few correspondence courses institutes in India have radio support in their instructional programmes and educational TV is mostly absent. About the only other mass communication medium employed to supplement instruction is the tape-recorder.

Correspondence courses institutes should make adequate use of the mass communications media to make courses more interesting and effective.

The institutes should have a well organised mass communication & audio-visual unit. These media could be especially helpful in carrying our programmes of adult education. universal literacy and continuing education.

Need for major equipment

It would be a great relief to the institutes if they could have their own printing units. It would ensure timely printing of good quality. It might even be more economical. But printing units are possible only if the institutes receive special grants for such purposes.

Considerable major equipment is also needed for mass processing of student records. We need to streamline procedures to give prompt service to students.

Work with organizations outside the nation

Every Indian correspondence course institute should be in touch with UNESCO, the Commonwealth Secretariat, ICCE, other international organizations, and a few universities or correspondence course institutes abroad. These organizations can supply expertise in one way or another. They can help Indian institutes to cope with both immediate and future educational needs.

(In return, Indian institutes can sometimes provide valuable insights for their colleagues abroad. -- Editor)

Problems and achievements of correspondence education in India

Dr. S.C. Goel
University Grants Commission,
(India)

This is the second in the series of papers of the All India panel.

Correspondence courses in Indian universities were introduced in view of the wide flexibility and adaptability of the system. The national policy on education in India recognises that unless both formal and non-formal methods of education are used, it would not be possible to move towards the equalisation of educational opportunity.

Since correspondence courses in India are offered by established universities, we have been able to ensure that the achievements of correspondence course students compare favourably with those of regular students by providing that admission procedures, contents of courses, and standards of examination are the same for both.

The instructional material prepared by the schools of correspondence studies is, as a rule, supplemented by contact programmes, special library facilities, home assignments, and the evaluation of student papers. The University Grants Commision has formulated comprehensive guidelines for the introduction of correspondence courses to bring about a certain degree of coordination and improvement in the standards of education.

The main problems faced by the schools of correspondence studies in Indian universities relate to (a) competitive efficiency, (b) coordination, (c) innovative measures in regard to restructuring of courses, educational technology and evaluation, (d) adequate utilisation of the available resources, and (e) the establishment of an independent coordinating agency.

The introduction of correspondence courses in Indian universities is a comparatively recent phenomenon. In March 1961, a committee appointed by the Government of India recommended an experiment in correspondence education in view of its wide flexibility and adaptability for persons whose urge for education could not be met by formal class instruction alone.

The University of Delhi, one of the leading universities in India, introduced correspondence courses for the B.A. Pass degree in July, 1962. Within a year, the university started attracting an increasing number of in-service and other students. The programme became more or less self-supporting.

Encouraged by the success of this experiment, the Indian Education Commission (1964-66) recommended the extension of correspondence courses as widely as possible. It also advocated correspondence courses in science and technology

Presently, 19 universities are offering correspondence courses for B.A., B.Com., B.Ed., LL.B., M.A., M.SC. and M. Com. with a total enrolment of about 70,000-80,000. Although we have not achieved the target of diverting 25 per cent of the total student population in the universities to non-formal education, there are a number of proposals for the expansion and diversification of correspondence courses. Institutions offering such courses are no longer considered to be inferior or peripheral. A proposal to incorporate an open university is under active consideration.

Several considerations have led to the wide acceptance and sustained growth of correspondence education in Indian universities. First, it is recognised that education is a key factor in economic development and social change. Second, in recent years there has been such an increased demand for higher education that we cannot meet the demand without developing alternative strategies providing for time and space adjustments. Third, the personal cost of higher education is quite high, especially when account is taken of the forgone earnings during the period of learning and the high drop-out rates.

This implies that higher education cannot reach the lower echelons of society unless opportunities are provided for "learning while earning". Non-formal education is thus an important pre-requisite in any effort towards equalisation of educational opportunity. Fourth, the principles of competition and excellence require that educational institutions should not enjoy unlimited monopoly power if they are to face squarely the challenges of our age and time. Finally, in the nature of things, education cannot become a continuing life-long process so long as it remains on the formal plane alone or a closed circuit or a preserve of the "elite".

It is difficult to say to what extent we have been able to realise the above objectives. Nevertheless, correspondence education has come to stay. From the very beginning, care has been taken to ensure that the achievements of the correspondence course students compare favourably with those of regular students. Admission procedures, content of courses and standards of examination are the same for both groups.

The University Grants Commission insists that the universities offering correspondence courses make adequate provision for contact programmes, special library facilities, home assignments, evaluation of student papers and programmes on radio and television. The responsibility for maintaining the standards of correspondence education has been entrusted to the university departments. The organizational set-up is that of an institute or school, permitting a good deal of flexibility in matters of procedure and financial accountability.

Another major thrust of correspondence education in India has been towards the coordination of facilities without impinging on university autonomy. Although universities are free to offer correspondence courses with the approval of their academic bodies, they generally seek the advice of the UGC which by law is responsible for the maintenance and coordination of university education in the country.

The Commission has determined that, ordinarily, correspondence courses at the undergraduate level will be introduced by only one university in a state, except when a university proposes to introduce correspondence courses in a new faculty at the undergraduate level, or when the university already offering correspondence courses reaches the optimum size (say an enrolment of 10,000), or for other valid reasons

The Commission also ensures that correspondence courses are started only by universities which have well-established teaching departments noted for their high standards. In terms of our guidelines, correspondence courses at the postgraduate level can be started only in those universities which have experience in running undergraduate correspondence courses properly for at least three years.

The cost factor is also important in a developing country like India. Generally speaking, a student enrolled in correspondence courses is required to pay the same fees as a regular student. This implies that the personal cost of correspondence education is at par with regular courses, except that when account is taken of forgone earnings and drop-outs, correspondence courses become much less expensive. On the other hand, the social cost of correspondence education is minimal. In the third and fourth five year plans, the University Grants Commission allocated funds to the schools/institutes of correspondence studies on a net deficit basis, but the grants were not claimed by a number of universities, since correspondence courses were on an even keel from the very beginning!

By and large, the performance of correspondence course students has been superior to that of the regular students in the universities and colleges, both qualitatively as well as quantitatively. This may or may not demonstrate a superiority of the correspondence method, but it does reflect the better motivation of correspondence course students. The majority of students enrolled in correspondence courses are in-service students, working in schools or offices or industrial establishments or defence services, having greater maturity, more intensive motivation, and a better command over expression. Consequently, their performance in examinations is better.

The picture of correspondence education in India is not without its shades. One of the main problems is that correspondence courses have not become sufficiently competitive. So far in-service candidates provide the main clientele for correspondence courses. But as this source dries up gradually, enrolments in some of the schools of correspondence courses start to dwindle.

Our experience so far is that regular students do not show any marked preference for correspondence education. A student who can afford to enrol for the regular course and forgo earnings, still prefers to join the regular course. Consequently, regular university courses continue to be under the pressure and strain of too many students. On the other hand, a number of universities are now permitting students to appear in examination as external students. This provision is particularly helpful to the weaker sections of the community, but all these factors adversely affect the demand for correspondence courses.

Correspondence courses have to develop a high degree of competitive efficiency and resilience in order to meet the challenges. One has to recognise that it is the national policy on education to have alternative strategies for the acquisition of knowledge. As one of these alternatives, correspondence education must learn to stand on its own legs without state protection.

There seems to be a lack of perspective in so far as universities are trying to duplicate facilities rather than to be innovative. There is a growing tendency for the universities to introduce correspondence courses for B.A. and B.Com. degrees and not to go in either for postgraduate courses or courses in science and professional subjects. Practically no attempt is being made to break new ground!

If there is proper imagination, nothing should prevent the schools of correspondence studies from introducing those measures of reform which fall into the pattern set by the university, e.g. sessional evaluation or unit courses of study, or a new paper relevant to the local environment, or an area of specialisation, or a paper with an interdisciplinary approach.

The main problem faced by the schools/institutes of correspondence studies. relates to the maintenance of standards. The reports of the review committees on some of the schools indicate that there is a vast room for improvement. Some experts are of the opinion that lessons in a number of subjects have been written sloppily. It is also alleged that student papers are not evaluated, corrected and returned to students on time. There are practically no study centres and the personal contact programme in many places have become perfunctory.

Ironically, these inadequacies are not due to lack of funds. In fact, most of the schools of correspondence studies accumulated large surpluses in the initial years!

To my mind, the following factors have to be taken into consideration in bringing about improvements in the standards of correspondence education: (a) There should be adequate preparation prior to the introduction of correspondence courses in relation to the syllabus and its units, methodology and preparation of instructional materials. (b) There should be coordination among different schools/institutes of correspondence in such areas as preparation of instructional materials, radio broadcasting, conduct of contact programmes, establishment of study centres etc.

(c) Measures should be adopted for the effective utilisation of financial resources in order to ensure that surpluses earned by the schools of correspondence studies are utilised for the development of correspondence courses and not ploughed back into the general revenue of the university. (d) Conditions should be created to enable the schools/institutes of correspondence courses to attract teachers of the highest calibre. (e) The time has now come when the schools should give evidence of being innovative instead of being replicas of the existing institutions.

The realisation of the above goals would, to a great extent, depend on the establishment of a central agency to act as co-ordinator, initiator and pacesetter in the diverse areas indicated above.

STEPS toward more effective correspondence education

Library services
Study centres
Student counselling

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This is the third in the series of papers of the All India Panel.

The needs of correspondence students today are almost the same as those of other students. Study material alone cannot make a student take up his course with zest; we must turn to other devices.

Extensive and efficient library facilities which reach beyond the local community are much needed. Study centres and mobile units can help us to motivate students. Finally, student counselling, by personal contact or by correspondence, is helpful at the pre-admission stage, during the course, and even after the course is completed.

Who is the correspondence student?

"Reading" Bacon said, "maketh a full man; conference a ready man; and writing an exact man". We do succeed in making the correspondence student read and write, but we fail to make him confer. To build him into a complete person we have to think in terms of 'conference' too. We cannot dole out study material at regular intervals and rest contented.

It is commonly accepted that the correspondence student is highly motivated and that when he joins a course it is to appease that craving for knowledge which life seems to have denied him so far. I would, however, tilt the stance and say that the present day correspondence student is as much or as little motivated as any other student. In India when he takes up a correspondence course he does so because he failed to get admitted to a regular college. He is determined to have a degree in spite of this failure.

When we began correspondence courses at our university ten years ago, eighty per cent of our students were working; they were between the ages of thirty and fifty. They did not need to be told how to study and complete their assignments. The correspondence student we meet today has to be goaded into reading as well as into writing and thinking.

When I refer to the correspondence student I have roughly three categories in mind:

- the student living in or very near the area where the correspondence unit is,
- the student living in a big city
- the student who is living or working in a remote village where the postman knocks only twice a week.

It is the last category which bothers me most. This student is usually very shy and unsure of himself, although he is highly motivated.

Steps towards more effective correspondence education

In order to lessen the drop out rate, general passivity and often indifference, mere dependence on study material will neither suffice nor be appropriate. In a country like India where the television and telephone have yet to reach the masses, we must count upon efficient library services, study centres, and student counselling.

Library Services

An independent, well-equipped and efficiently run library is essential to any correspondence unit. This should be obvious. The library should have not only the text and reference books, but it should also be well-equipped with journals, and if possible, Xeroxing or duplicating equipment.

Apart from remaining open to students at all hours of the day, the library should extend facilities to students at a distance in these ways:

a. Supply lists of relevant books to these students so that they know what books to ask for. Issue lists of new books. The Xeroxing or duplicating section should copy material from journals and books which must remain in the library.

b. Open sub-branches of the main library in places where student concentration is appreciable. The local colleges as well as a correspondence unit (if there is one) could be of utmost help.

c. Send library personnel with the basic reference and text books to the students working or living in remote and undeveloped areas. Even a fortnight's exposure to such reading material can make a student more active than he has been.

d. Establish book banks for students who want to borrow extra books. This would encourage the willing student and, perhaps, motivate the less willing.

Study centres and mobile units

Opportunities for personal contact in a correspondence course are limited. But meeting students now and then in a classroom situation in cities where there is a concentration of students is an effective way of bridging the gulf between teacher and learner. Face to face lessons help to pull students out of the stupor they fall into. During or immediately after a contact program the frequency of student assignments increases and the quality of answers also improves. But in a country as large as India, contact programs cannot be held for all the students. Study centres at various places help us meet some of the student needs. A teacher is assigned a group of students and they meet once a month. Or a member of the teaching faculty in a nearby college takes charge of a group of students at a place where there are not many correspondence students. There is no dearth of such places.

The function of a study centre is to:

a. encourage group activities such as discussions and paper readings. Students are informed in advance about the topics to be discussed. The teacher acts as moderator; the students do most of the talking.

b. invite students to come with their problems arising our of the study material they have received.

These facilities, again, are available to students residing in or near the place where the correspondence unit has its headquarters or in cities where the correspondence unit can seek help from local colleges. Students in remote areas still remain unattended.

If we could form some kind of mobile unit which could travel to distant places, then more students could be benefited. Some places could be visited just as the course begins - this would provide orientation - and the remaining places could be scheduled at various times during the year.

Student counselling

Student counselling begins with the pre-admission period, continues through the duration of the course, and is helpful even after the course is completed. Student counsellors, by personal contact or by correspondence, help students

--to reach the right person at the right time. Counselling is a short cut on an otherwise long trip.

--to know their own minds. Even after getting enrolled, some students feel that they are in a blind alley; they are tempted to drop out. If someone will listen to problems and suggest possible solutions, confused students are at least less confused.

--to find out about opportunities that may go unnoticed otherwise. Student counsellors should watch for advertisements of jobs for which their students might be qualified. A job newsletter should be brought out every month.

Conclusion: in the process of becoming

I do not suggest that these three steps make correspondence education a foolproof system. We are in the process of becoming. Whatever little we can add to give this system of education an extra dimension will mark a step towards achieving an effectiveness which is elusive at best. Nevertheless, by developing the library, by maintaining study courses, by emphasising student counselling, we may perhaps some day say (with apologies to Bacon), "Correspondence studies serve for delight, for ornament, and for ability."

Financing correspondence education in India: some relevant questions

Ruddar Datt,
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The relevant questions are: For whom is correspondence education meant? What should be the scale of fees for correspondence students as compared with their counterparts studying in the colleges and universities?
Should correspondence education be organized as an alternative technique capable of growing and developing into first quality teaching or merely as an inexpensive method of imparting instruction?

In discussing these questions, Principal Ruddar Datt, School of Correspondence Courses, University of Delhi, comes to some strong conclusions as to what India must do.

Most courses offered by correspondence institutions in India are a mere extension of the courses offered by the traditional universities. They lead to bachelor's and master's degrees.

Correspondence education in India began in 1962, but only in the last four years or so have graduate courses been included. Correspondence enrolments are about 2.1% of the total enrolments in all Indian universities.

Here are some of the characteristics of correspondence education in India:

a. Correspondence education is limited to a few courses in liberal arts and the social sciences.

b. No attempt has been made to develop science education with the help of the correspondence technique.

c. Specialised and vocational courses for adults have not been developed.

d. Little effort has been made to conduct research on how well correspondence education operates in India. The universities have not determined how effectively knowledge is transmitted by correspondence and have not found the proper relationship between costs and benefits.

The concept of the open university has been tried in two universities in India - Mysore and Madurai. Irrespective of any previous qualification, a person above 25 years of age can take up an undergraduate course and a person above 35 years can take up a graduate course.

Two main factors

Two main factors are responsible for the present situation. Correspondence courses are not in the mainstream of the traditional university, therefore the universities find very little time to discuss questions related to correspondence education. Secondly, it has been the policy of the government (both at the national and the state level) to expect correspondence education to be self-supporting. Obviously, this policy has limited the development of facilities for correspondence students and discouraged innovation.

Even at the time of the formulation of its Fifth Plan, the Planning Commission thought that the per capita cost of correspondence education should be 25% of what it costs to educate a student in a university. Since fee income from correspondence students was sufficient to meet the expected costs, no provision was made in the Fifth Plan to provide financial support for correspondence education.

The logic of this approach is reflected in the pattern of income and expenditure of different correspondence course directorates in India. (Refer table 1). *The data indicate an inverse relationship between fee income per student and expenditure per student. Institutes which charge higher fees per student are spending much less per student than those which charge lower fees.* This is the direct consequence of diametrically opposite philosophies about correspondence education operating in different institutions.

Table 1: **Some Important indicators of Income and Expenditure of some Correspondence Courses in India.**

(£ at current prices)

	Rajasthan University (1976-77)	Himachal Pradesh (1974-75)	Punjab University (1975-76)	Delhi University (1976-77)
Average Fee per student (£)	27.1	26.3	21.6	13.8
Average expenditure per student (£)	14.1	17.2	20.9	21.6
Fee income as percentage of expenditure	191.8%	153.1%	103.4%	64.0%

1. *Our first question:* **For whom** *is correspondence education meant?* Our experience shows that correspondence courses attract the following categories of people:

a. persons who are handicapped economically or otherwise to pursue higher studies.

b. Persons who are in employment but want to improve their qualifications so as to better their prospects.

c. Housewives who intend to utilise their spare time.

d. Students who have been denied a seat in a regular college because of lack of space.

In an underdeveloped country like India, the bulk of the correspondence course students belong to the economically weaker sections of society. A large majority suffer economic hardships, some are physically handicapped, while some others support their families as well as finance their education.

What should the scale be?

2. The second relevant question, therefore, is: *What should be the scale of fees for correspondence students as compared with their counterparts studying in the colleges and universities?* Socio-economic considerations provide ample justification for a more sympathetic treatment for this group of students who, broadly speaking, are at the lower rungs of the ladder of the socio-economic hierarchy. There is absolutely no case for charging fees higher than those obtaining in regular college. Rather there is a strong case for charging *lower fees.* At Delhi University the same fees and benefits are available to correspondence students and regular students.

Acceptance of the parity principle has enabled the School of Correspondence Courses to grant exemption from tuition fees to 20 per cent of the students enrolled. This has resulted in a significant decline in fee-income.

But unfortunately, this philosophy of providing help to working class students does not find favour with the University of Rajasthan and Himachal Pradesh. They continue to charge correspondence students much higher fees.

Since correspondence students are spread over the entire country, they find it difficult to organise resistance against high fees. University students, being organised in student unions, offer strong resistance against any attempts to escalate fees. Universities and/or governments are, therefore, reluctant to raise fees in colleges and universities, but some universities raise fees for correspondence students because there is no strong resistance. This should not happen.

If a developed country like Britain can keep correspondence students fees way below cost (as is done at the Open University), there is all the more reason why an underdeveloped country like India should adopt the plan. The economically disadvantaged people are a much greater proportion of the total population in India.

Do we want qualiy or low cost?

3. *The third relevant question is: Should correspondence education be organised as an alternative technique capable of growing and developing into first quality teaching or merely as an inexpensive method of imparting instruction?* If the charge of spreading sub-standard education by correspondence teaching is to be

avoided, then its organisation must be made more rational. This will necessitate the following:

a Improving the teacher-student ratio so that the problems of correspondence students can be attended to more efficiently.

b. Increasing the duration of personal contact programs to 20-30 days in a year.

c. Increasing the number of assignments to be submitted.

d. Increasing ancillary aids such as libraries, tape-recorded lessons, T.V. and radio programs.

e. Introducing a tutorial system.

f. Improving the quality of reading materials (both in content and presentation) by seeking help from experts in various fields.

The object of correspondence education should not be low cost education, but more effective education. Since face-to-face contact with the teacher is limited, an effort should be made to fill the deficiency by the other supporting measures shown above. If all these supporting measures are to be provided, *more money will have to be pumped into the system.* It is thus increasingly difficult to make correspondence education self-sustaining.

Open University points the way

Table 2: **Analysis of Undergraduate Income in Open University (England) in pounds.**

	1971	1972	1973	1974	1975
Tuition fees/FR student	35	36	43	42	42
Grant/FR student	307	248	261	297	327
Income/FR student	342	284	304	339	369
Tuition fee as % of income	10%	13%	14%	12%	11%

Note: FR implies finally registered.
Source: Walter Perry, *Open University*, p.236

It is relevant to draw upon the experience of the Open University (England). In Table 2 the figures reveal that between 1971 and 1975, tuition fees ranged between 10 to 14 per cent of total income of the university. State support has, therefore, contributed 86 to 90 per cent of total income. *This is in sharp contrast with the attitude of the state in India which intends that finally 25 per cent of the total university population should be provided instruction through correspondence courses but does not come forward to support this system of education.* If correspondence education is to suceed in India as a quality method of education then (a) the cost per student should be half the cost incurred for a regular student in a university and (b) state support should be available to improve the quality of instruction. The emphasis should *not* be on raising fees and thus exploiting the economically weaker sections of our society.

In Summary

The upshot of the entire analysis suggests that in order to make correspondence techniques develop and grow, India must

1. Set up an Open University and federate correspondence institutions with it.
2. Increase the amount of state support so as to improve the quality of correspondence education; do not raise fees.
3. Spend per correspondence student one-half (not 25%) of what is now spent per regular student.

How can a developing country achieve its manpower targets? A personal view

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"Distance education provides more education for more people at the least cost, but developing countries are not yet utilizing its full potential.

"In Africa, the situation in education is critical. The formal system of education and the constraints of resources are no cause for optimism about any appreciable progress in the future. The literacy level hovers between 10 and 25 per cent.

"In Nigeria, with 25 per cent of Africa's population and great potential wealth, the expenditure for education is high, but the training of professional and skilled manpower is minimal. The target set by government cannot be attained through the formal education system."

The above represents a part of Dr. Urhobo's personal view. In the paper which follows, he points out what developing countries can and cannot do. He also makes some strong and specific recommendations to ICCE and its member schools. "An aggressive and imaginative approach is called for," he concludes.

There is an educational gap in formal education, particularly in the developing countries (Nigeria is an important example.) Distance education is vital in bridging this gap. More technical training is needed. Mid-level technicians are essential to rapid economic development, to the increase in employment opportunities and a higher standard of living, to improvement in literacy, and to better health.

Distance education has many advantages; it is becoming increasingly important in providing education for people who otherwise would not have an education which would provide rewarding employment.

Unfortunately, in spite of the publicity given to distance education, many developing countries who should benefit from distance education are not yet fully committed to its use. They continue to be satisfied with minimum output from maximum input into formal education.

One view states that illiterate and poor people in the world are happy people and education only increases their expectations without giving them opportunities to satisfy their needs and desires. Another view states that population is increasing at a pace exceeding food production, that illiteracy breeds disease, low productivity, large populations and misery. Unless there is a world-wide attempt to eradicate illiteracy, poverty, and disease and unless people everywhere in the world can obtain practical, inexpensive education and training for employment, the world will continue to have larger and larger numbers of people living in misery. Such a situation threatens the stability of the human community.

It is on record that in spite of limited successes, after 30 years of international development, *the number of the illiterate and poor in the world has increased especially in two-thirds of the world.* The employment gap has steadily widened and under-employment is widespread.

Before 1960, the developing countries were producing enough food for themselves and exporting a considerable surplus of about 11 billion dollars to the developed world. From the late 60's to the present day, the developed countries have been shipping food to the developing countries to the tune of about 20 billion dollars a year. The notion that the poor illiterate people are happy and should be left alone is an unacceptable proposition in our present day.

1. The world situation in education:

The world situation in education is best illustrated by the figures of the International Labor Organisation (ILO). Between 1960 and 1970, illiteracy in the world ranged in North America from 2.5% to 1.5%; Europe and the USSR 5.3% to 3.6%; Oceana 11.5% to 10.3%; Latin America 32.5% to 23.6%; Asia 55.2% to 46.8%; the Arab States 81.1% to 73.00%; and Africa 81.1% to 73%. The expenditures in education by the same countries were North America, between 65.6 and 71.8 billion dollars; Europe and USSR, 60.7 and 66.3 billion; Oceana, 1.6 and 1.9 billion; Latin America 4.3 and 4.7 billion; Asia, 11.4 and 13.2 billion; Arab States 1.6 and 1.8 billion; and Africa 2.7 and 2.9 billion.

The gap between North America, Europe and the rest of the world is very wide. The Arab States and Africa represent the worst areas. It would be overoptimistic to imagine any appreciable reduction in illiteracy in these areas in the next 20 years. The formal education systems have growing constraints of material resources and personnel.

2. The situation in Africa

The African situation is a depressing one. The United Nations estimates that 50 per cent of the population of Africa is under 15 years; the literacy rate is only 10 to 25 per cent. Africa has several resource constraints in providing adequate education through the traditional systems. Between 20 to 30 per cent of national revenues are devoted to education each year, yet the wastage in education is alarming. Less than 20 per cent of Africa's population go through any form of education. The drop-out rate is as high as 60 per cent.

The whole educational expenditure succeeds only in providing elitist education for less than 10 per cent of the existing primary school population. The opportunities for technical education are insignificant to the population needs. In order to provide primary school education for the school population of Africa, the governments of Africa must find, at present levels of expenditure, at least 50 per cent more capital expenditure per year for the next ten years and 50 per cent more current expenditure annually. This is simply not possible given the size and rate of growth of their economies versus population growth.

3. The situation in Nigeria

Nigeria has 80 million people, 25 per cent of the African population. It is potentially a wealthy country, but it provides education at great financial costs; other development projects require much of its available resources. The Government's target for 1980 is to obtain at least a 50 per cent enrolment in primary Schools. While some small areas have attained as high as 86 per cent in enrolment, others are only between 9 and 34 per cent.

In 1964 there were only 14,976 primary Schools in Nigeria and 2,849,488 pupils. In 1974 there were fewer schools but 4,391,197 pupils. The population of children who should be at school between the ages of 6 and 15 in 1974 was about 26,000,000; the actual figure at school was only 4,391,197 or less than 10 per cent! There are only five technical Schools in Nigeria. Together they have a population of 1000 to 1,500 and an annual intake of 250 to 500 students. Between 250 and 500 students are graduated each year. The secondary school population is only about 20 per cent of the primary school population.

The universities in Nigeria have increased from six in 1975 to a total of ten at the present time. They have a student population of under 21,000. About 3,000 university students in Nigeria are graduated each year; another 2,000 are graduated from overseas universities. *A very generous estimate therefore is that Nigeria produces about 5,500 university graduates and 500 to 750 technicians a year.*

The Federal Government requirements, as published by the National Manpower Board recently, are 109,000 technicians by 1980. The present number of technicians in the country is estimated to be less than 7,000; this number is increasing slowly. *It would be an extraordinary feat for Nigeria to achieve a target of 109,000 by the end of this century, not to talk of 1980.*

The capital cost of education in the 1975/80 period is estimated at N64.55 million a year (N1 = US$1.60). The annual cost has increased from 31 million a year since 1965 to about double, with the launching of free primary education in 1976. Education now forms about 30 per cent of the federal budget; combined with Administration and Defence it takes about 70 per cent of the annual budget. The development budget is weighted heavily in favour of communication, transport and education. Seventy per cent of the 30 billion Naira development budget for 1975 to 1980, is already absorbed by education and communication.

In the developing countries, formal classroom education is not likely to meet the needs of the existing and growing population. It will not provide the skills required for adequate self employment or skilled employment. The costs are prohibitive and not within the reach of most countries. *Only a small elite emerge through the present system, while the majority remain ignorant and poor.*

The most disturbing failure of our formal educational system is that it does not provide sufficient technical personnel to cope with the needs of society. Furthermore, the majority of the graduates of formal non-technical education in developing countries (about 80 per cent per year) are unemployed or underemployed.

4. The advantages of distance education

There are several advantages of distance education for developing countries. It is faster and less expensive than formal education and it can be accomplished at the student's individual rate of progress, while he is working and irrespective of the occupation he is engaged in. It is the least expensive and fastest method of educating a much larger number of people than is possible through formal education, especially given the constraints of resources particularly of finance and personnel.

The only reasonable prospect for any developing country in achieving its manpower targets is through distance education and short practical training in workshops. Distance education can therefore be used to eradicate illiteracy, develop both specific job skills and management techniques, and increase productivity. All these contribute to more rapid employment opportunities and help to reduce poverty.

5. Recommendations

It is imperative that ICCE endeavour to accelerate the recommendations made in previous conferences on distance education. It should direct its energy to encouraging its member schools to *expand distance education because it is the only choice for most countries of the developing world.* In this connection, the following should be borne particulary in mind:-

(a) The manpower needs of the developing world and the economic growth, employment and the basic human needs requirements of the people of these countries indicate that *there should be an immediate shift to technical education. An aggressive and imaginative approach is called for.*

(b) The gap in technical education is critical at the practical training level particularly. *ICCE members should be encouraged to cooperate in setting up joint training centres in conjunction with private enterprise and other interest groups on a national and regional basis in order to increase the number of technical graduates with practical experience.*

(c) Distance education should move now into new areas of relevance for developing countries. It should concentrate on wiping out illiteracy, providing technical education at the lowest level, and preparing more primary school dropouts to qualify to take technical education courses. Such courses would train entrepreneurs in small business, particularly agriculture and rural-based industries.

The objectives are to increase the opportunities for self-employment in the face of increasing unemployment and under-employment in the developing world.

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ULSA trains its students "in-company" in 22 countries

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The fundamental aim of Universidad La Salle de Sud-America (ULSA) is the bettering of the working adult by means of "incompany" training.

Located in Buenos Aires, Argentina, the school contracts with corporations to train their employees in Spain and Latin America -- 22 countries. The employees study management, finance and accountancy courses related to their daily work.

The article which follows explains how the company and ULSA jointly establish correspondence training and assist interested employees in a typical company. Note especially the activities of the ULSA representative, the company coordinator, and the educational counsellor.

In reviewing the total ULSA experience, Mrs. Milanesi also deals with the problem of motivation, possible causes of dropouts, and an experiment in the Brazilian market in the use of educational counsellors.

Most schools enrol individual students; Universidad La Salle de Sud-America primarily enrolls companies and through the companies individual students are involved.

Once an agreement has been reached between ULSA and a company, an informative meeting takes place with employees from the administrative, finance and accounting areas. *All* the employees in those areas are allowed to participate in these meetings. *All the people attending these meetings are possible students; the executives do not choose the students.*

The ULSA representative, generally accompanied by an executive of the firm he is visiting, enlightens his listeners about the characteristics of the training programme, availability of the courses, the objectives and the benefits to be obtained by those who enrol. Questions are answered and employees are given one or two days to decide whether they will enrol in any of the courses described.

The Company Coordinator enters the scene. Once the student group has been formed, a *coordinator* is appointed by the management. He is usually a senior executive or a member of the training director's staff. The decision depends upon the structure of the company.

This coordinator is responsible for the handling of communications between

ULSA and the student group, the sending of assignments to ULSA, and the reception of the corrected assignments. *The coordinator collaborates with the technical departments at ULSA.*

The programme starts when the ULSA representative delivers the material to the students enroled. It is at this point that the coordinator begins his job.

Apart from the handling of communications (already mentioned), he has to motivate the student group to keep up their morale and *help them maintain the rhythm of work each one has set for himself.* The work of the coordinator is checked by the ULSA representative in his periodic visits.

ULSA considers the student-teacher relationship fundamental. All along this process of study a two-way communication is established through the correction of assignments and the comments made on these assignments. An evaluation of the students' behaviour is made and indicators of the progress of their work serve as a basis for orienting hints. The policy is that the students should not feel neglected.

Everyday the assignments from the 22 countries reach our teaching department. They are returned in 24 hours.

How ULSA tackles the problem of motivation

The knowledge acquired in the long experience of correspondence teaching led us to analize in detail the reason why certain companies have difficulty in carrying out a study programme.

The highest completion rates are attained in companies with a clear understanding of the vital problem of training and with a high regard of work morale and respect for training.

The fact that a company decides to sponsor a training programme for its personnel, however clearly it bears witness to the desire to improve as an organization through the increased economic usefulness of its employees, *is not in itself sufficient to bring about the necessary study motivation.* It is also necessary that the different hierarchical levels in the company *actively participate in supporting the training* and that all the people involved give their whole-hearted support to the programme. Where these conditions prevail, we find group atmospheres that really facilitate student performance.

The motivation to learn is the result of both the students' inclination and the company's need as made evident by an atmosphere that is favourable for learning.

Another experience worth noting is the influence of authority on student decisions. There is relatively little influence on student motivation. When a student is included in a training programme which he has not requested or when he decides to give up a course, the approved or disapproval of his superiors has little influence on his decision.

Possible causes of drop-outs

The studies conducted by ULSA have resulted in the identification of the following drop-out causes. Statistically, group-type factors prevail.

1.- Students enrol in courses under the influence of the group in which they work. They do so to avoid a feeling of isolation from the group. When the need to belong has been satisfied, intrinsic motivations to study decrease, which usually leads to drop-outs.

2.- Drop-outs result from imitative behaviour. The dropping-out of a prominent of a group increases the danger of other group members dropping out.

3.- Students give up for fear of not meeting the requirements of their superior and/or fellow-employees. They may fear of resent exposing their weaknesses within the group.

4.- Students give up their studies, (a few of them even without starting) because they are unable to overcome fears of a new experience; fears of being evaluated; and fears of the requirements of independent studies.

5.- Students give up their present studies because they gave up their past studies. These are people who have repeatedly started and interrupted their studies.

6.- Students who enrol motivated mainly by the desire to obtain text material are naturally more apt to drop out than others. Once in possession of these materials, they have attained their most important objective. They usually submit few assignments and quickly feel that they have satisfied their need of knowledge.

7.- Dropping out is sometimes due to imcompatibility between the expectations that lead to the students' enrolment and the feelings of what they think they can achieve through studying.

8.- When there is a lack of agreement between what the student hopes to achieve through study and his estimation of the work and support required of him, the student is likely to be a drop-out.

In the Brazilian market, a new figure, the educational Counsellor

ULSA has brought a new figure into the system - the educational counsellor. He has the role of helper, especially assigned to motivate groups. Both the company coordinator and the ULSA representative do the same but they have other duties elsewhere.

This experiment was started in 1976 in the state of Sao Paulo, Brazil, and we have already had optimistic reports as to its results.

The educational counsellor has to undergo a period of training in adult psychology, motivation resources and group techniques. His is the task to establish adequate learning situations, to foster proper attitudes towards learning and to strengthen the inner motivation of students enrolled in institutional training programmes.

Once he has taken over his duties he must take into account the following guidelines of action:

1.- To keep up the initial motivation that led a student to choose a certain course.

2.- To contribute to the acceptance and adoption of a non-conventional teaching system.

3.- To implement the handling and use of study techniques.

4.- To stimulate the development of individual and group strategies, and to set reasonable short, medium and long term goals.

5.- To orient the students to make use of the support services ULSA offers and the operating techniques it employs.

6.- To strengthen a student's desire to keep on working by recognizing the effort he has made, or to indicate that a goal may not have been achieved when this is the case.

7.- To detect individual difficulties that demand individual attention.

The most important tool the eduational counsellor has at his disposal is verbal communication, but he can create an atmosphere of harmony and collaboration that fosters learning.

This is the way we do in-company training, but we are continually trying to improve our teaching.

The critic comments on "ULSA trains its students....."

Dr. Börje Holmberg (Sweden)
"at Fernuniversität
(West Germany)

Universidad La Salle de Sud-América (ULSA) in Argentina is an interesting and successful institute of distance education which serves 21 countries. Apart from Latin America, ULSA has students in Spain and Portugal. The teaching languages are Spanish and Portugese.

The most typical characteristics of ULSA are - it almost exclusively serves personnel training in companies; contracts are usually made with companies, not with individual students.

- the subjects taught all concern business administration, with accountancy emphasized.

- the headquarters for course development and distance tutoring is Villa Ballester (close to Buenos Aires), but resident directors are in charge of contacts with the client companies in the various Latin American nations.

I have scrutinised some ULSA teaching materials and student papers and worked with the ULSA heads of departments for two weeks in 1976 and one week in 1977. What has above all impressed me in their educational work is

- the extreme care taken to ensure forms of presentation are likely to facilitate learning and appeal to students.
- the tutorial work done by those who mark student papers.

The tutors provide full, personal comments on individual student achievements and difficulties, often not only in notes at the end of a student's solution or in the margin, but also in personal letters. There is a remarkably short turn-round time; every assignment submitted is returned with corrections and comments within 24 hours of its arrival.

In short, the enthusiasm and devotion to distance education within ULSA is strong and powerful and therefore likely to inspire other educators.

Mrs. Milanesi's presentation of the educational endeavours of ULSA will, no doubt, attract much attention among colleagues in various parts of the world when, against the background described, she reports on what ULSA has attempted to do, what results have been attained and what progress made. Her audience will make comparisons with similar efforts made by others.

The Adventure: carrying distance education over 4,000 miles to American Indians[1]

Carol Tribe,
Weber State College
(U.S.A.)

It all began when the U.S. Office of Child Development (Washington, D.C.) proposed to upgrade the competencies of teachers of young children in government-supported Head Start programs throughout the nation. The Indian reservations[2]—all in remote, isolated areas—had many Head Start programs, but no way of training teachers. Many of the Indian teachers could not leave their families for long periods of study on a college campus.

Weber State College (Ogden, Utah, U.S.A.) was asked to provide suitable training for 200 non-professional Indian teachers who were already teaching nearly 12,000 children.

In the paper which follows, the director of off-campus programs describes an adventure which involved, besides herself, a field instructor with bus, a group of Indian teacher-co-ordinators, and 200 teacher-trainees in remote areas scattered along a 4,000 mile (6,400 kilometres) trail.

The Indians danced all night

The strange sound of the Indian drums echoed through the poplar forest by the banks of the Missouri River. The moon was full. The Indian[1] people danced in a circle chanting tribal songs. The sights, sounds, words and music were intriguingly different. I had never heard the like before. It was an emotional experience that penetrated my very being. While it was not possible for me to understand the songs, the emotional tones were powerful as some of the songs portrayed pride of heritage; others were like a mournful cry from a forgotten people. The beat of the drum continued throughout the night, and the Indians danced until the first sign of the morning sun appeared on the horizon.

The Indians dancing were people from reservations in the states of Montana, Idaho and Wyoming who worked in Head Start programs. We had all gathered at Wolf Point, Montana on the Fort Peck reservation. The director and the training co-ordinator for the Tri-State Tribes Office of Education for Young Children had invited us to a meeting. They asked us, "Would the department of child and family studies at Weber State College consider becoming the trainers for Head Start teachers on their reservations?

Head Start is a U.S. government project instituted across our nation to help disadvantaged children and adults learn the necessary competencies and skills for living productive lives in the mainstream of society. *The Indian reservations had many such programs, but they had no way of training lay teachers who worked with their children.*

It was shocking and sad to listen to them recount the various unsuccessful training plans that other colleges and agencies had offered them. The Indians had spent thousands of dollars of government money to improve their education, but without significant results.

As I watched the reflection of the moon on the river and listened to the chants and the shuffling feet, it seemed most important for us to find a way to answer their cry for help. They needed and wanted an education which would enable them to function successfully in the 20th century.

Weber State College believes in an education for all and in fulfilling needs wherever they are found. But this task seemed overwhelming! There are 18 different tribes on nine different reservations; it would take 4,000 miles (6,400 kilometres) of travel to reach everyone. All the reservations are in remote, isolated areas. The Indian people who had once roamed this entire nation had been moved onto specified lands in far-off corners of our country. The reservations are at least 2,000 miles (3,200 kilometres) away from our college. Most of the Indian teachers could not leave families and classrooms to come to the college. *How could we find a way to take the college to them?*

As we left Wolf Point that afternoon in a small, twin-engine aircraft, the director, training co-ordinator and two of us from Weber State College huddled over a map. We tried to figure distances and routes for visiting each reservation. The ride was rough, but the director and the co-ordinator seemed to relax as they sensed our commitment.

We returned to the college and reported our experience. Administrators and faculty were supportive and encouraged us to develop a practical plan. But we must keep costs to a minimum!

The beginning of a friendship

The first step of our adventure was to visit each reservation to become acquainted with the people in their home setting. Two worlds were meeting. White people and Indians listened to one another, shared their feelings, and communicated with one another. We attempted at that time to help individuals and groups define their own educational goals. In most cases all they could state was a desire for quality education for children and parents.

As we became acquainted, however, the following became evident:

—Materials would have to be adjusted to meet cultural needs and individual abilities.

—Indian Head Start teachers had been made to feel they were inferior intellectually and unable to learn.

—The majority of the Head Start directors and teaching personnel expressed doubt that any white person could or would work honorably with them.

—Indian cultural values did not lend themselves to high motivation or to the American "success theme."
—Reservations are in remote locations; many cannot be reached by air. Winters are severe. It had been difficult, if not impossible prior to this time, for anyone to provide professional instruction and consulting service in the traditional manner.

—Some Indian teachers had not graduated from high school while others were college graduates. In teaching them we would have to make adjustments for various levels of competency.

—It would be necessary to help the Indians to define their cultural values in ways which would meet U.S. government certificate standards.

From this visit came our determination to help the Indians to know success in the learning/teaching process. We became committed to helping them to break out of the educational failure syndrome they had repeatedly experienced.

Preparing for the adventure

For two years prior to the adventure, the department of child and family studies had been working on educational materials which would aid Head Start teachers and others. Basic tools for working effectively with both adults and children were developed. The curriculum was based on the following:

(1) Everyone can learn. Instruction should begin at the point of success. If teacher-trainees are successful and have a positive self-concept, they in turn can teach children and families to develop a sense of worth.

(2) If learning is the goal, materials must be suitable, tests and the learning environment must be non-threatening. This means tender, loving care must be given.

(3) Optimum learning occurs when a concept is taught, then applied promptly. Teacher-trainees must be given the opportunity to observe model teachers and to solve problems pertaining to the teaching of young children.

The basic child development courses for teacher-trainees had always made provisions for individual differences. The tone was non-threatening. Emphasis was placed on learning specific skills or competencies.

Our materials had been field tested in a variety of settings among individuals from diverse cultures and various levels of academic proficiency. The department was already involved in non-Indian Head Start training in the states of North Dakota, South Dakota, and Colorado. With the new Indian adventure we would be taking our program to six states.

Our visit to the reservations had alerted us to the fact that our material would *again* have to be revised to serve the Indian culture. We adapted our materials to meet both cultural and individual differences as we now assessed them. All reading materials were put on audio tapes to help those with limited reading skills. Video tapes were made to show our model children's school in action on campus. Multi-ethnic pictures replaced pictures of white Americans.

The adventure

The curriculum and the media were ready for the Indian teachers. The field instructor was employed and settled in a home on wheels—*the bus*. We had attempted to anticipate all eventualities as we began our actual adventure with the Indian people of the Tri-State tribes.

Blonde, fair-skinned Julie[3], later nicknamed the "Albino Indian Girl" by the Indians, was selected as the field instructor. She would be a travelling teacher, making a continuous circle of the reservations. The circle took approximately five weeks to complete. Time allotted each reservation was determined by the number of Head Start centers, staff, and children.

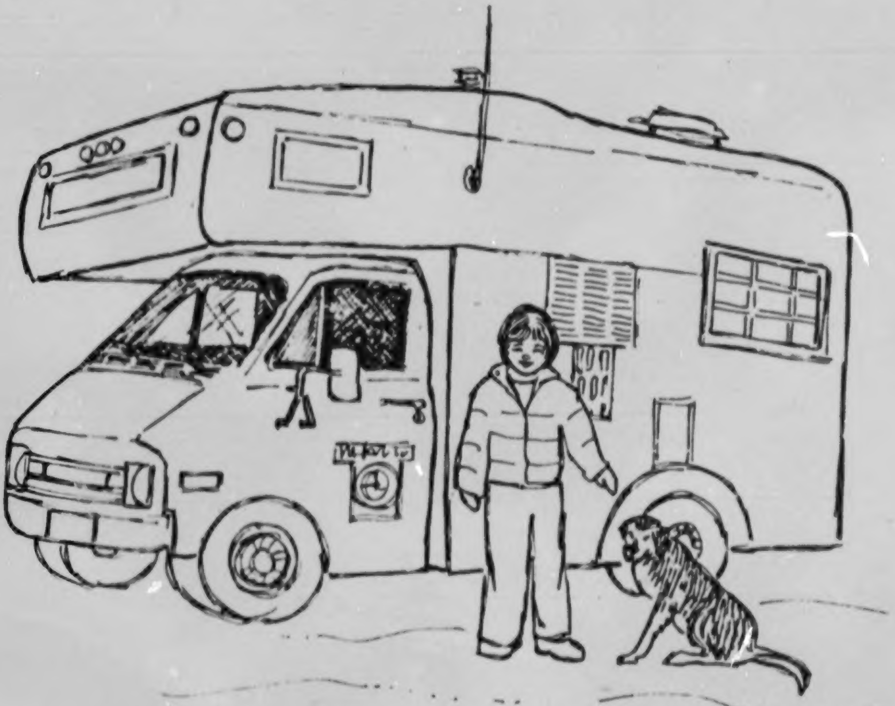
If our program was to succeed, Julie must be trustworthy, have a good understanding of child development and early childhood education, be non-threatening, non-prejudiced, sensitive, and devoted. In addition, she needed to have a multitude of additional skills such as changing tires on a bus in a blizzard, repairing the bus, digging out of snow drifts, eating food of another culture, and enduring all-night drives to honor pre-arranged schedules. Over the past three years she has proven herself to be an amazing individual.

Julie became endeared to the Indian people through her willingness to participate in their religious ceremony, the "stick game" at which she was invited to eat pup and rattle snake. She got bucked off horses and covered up her fear. The scratches and bruises from picking bull berries for pudding became badges of honor. She was proud to don an Indian shawl and dance the night through with her friends. When they started teasing her constantly, she soon learned they were saying, "We like you." The Indian children taught her some special words which she carefully learned, only to find out later she was swearing. Through her close association with Head Start programs, she has come to believe that some of the cultural values of the Indians are preferable to her own.

The bus was a home for Julie and her dog Bo, a library, a media center, and a depositary for office records. During the past three years the motor home from Weber State College became a familiar sight on reservations and routes along the way.

The bus was nicknamed "the Ox" by the Indians. They laughed when they saw it coming for it was big, cumbersome and awkward. As Julie arrived at the Assiniboine Reservation at Fort Belknap on her initial journey, the tribal chairman presented her with a special *eagle feather*, an Indian religious symbol, to hang in the bus. He said, "This feather will protect you from bad spirits.

Evil will not come into the bus and overcome you. You will have a safe journey." To this day, Julie believes that her faith and the Indian's faith in the *eagle feather* was, in part, responsible for bringing her through awesome experiences unharmed.



JULIE, HER DOG BO, AND "THE OX."

Five weeks between Julie's visits was a long time for an individual trainee to work alone. An Indian teacher-coordinator was selected from each reservation. These people provided an important link between the college, the field instructor, and the trainees. Teacher-coordinators received additional training about every three months at Weber State College or in a central location. They were instructed in course content and were also introduced to discussion and teaching techniques. The coordinators aided college personnel in observing and evaluating trainees' work. They provided feedback and support for all of us.

Julie and the teacher-coordinators became a working team for each center and reservation. Weber State College faculty provided support by training the teacher-coordinators on campus, communicating with each reservation once a week, developing printed and audio-visual materials, keeping records, and traveling to reservations to evaluate progress.

The achievement summarized

Indian teachers in the Tri-state program began to realize their potential as "successful" teachers. We were trusted by the Indian Head Start personnel. Our media, tests, and materials met the needs of a wide range of abilities. Isolated areas which had suffered from lack of training were reached and improved. We met schedules even in severe winter weather.

Our goal was to stay with the Indian people until they became strong enough to maintain the competency level achieved in the initial three-year period. The well-trained teacher-coordinators from each reservation were an important part of this plan. Our goal had been accomplished. This year (1978) we are giving minimal help only (as the co-ordinators request it).

A banquet held in Billings, Montana honored the Indian teachers trained by Weber State College. They received certificates which indicated that they had met nationwide U.S. government standards for teaching young children.

Indian pride was felt throughout the banquet hall. The new "graduates" were the first Indians in the entire nation and the first Head Start teachers in Montana to receive this honor. They had moved ahead of predominantly white Head Start programs!

Tri-state Indian tribes had reached their original stated goal. They now had competent Indian teachers to give quality education to children and parents. More than three years of exhausting work was over. *We came; they achieved; the adventure succeeded!*

Notes

1. American Indians (so-called) are the inhabitants who were in North America when Columbus landed in 1492. Thinking he had reached India by sailing west, Columbus incorrectly called the inhabitants "Indians." The name survives.
2. An Indian reservation in the U.S.A. is a vast piece of remote public land reserved for the exclusive use of Indians.
3. Julie Holmgren received her bachelor of science in child development from Weber State College in 1973. Life on a farm in Tremonton, Utah probably helped to prepare Julie for her demanding adventure.

Satellites in distance education: Canadian experiments on the Hermes satellite

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Given satellites, distance is no longer an educational barrier. The experimental Hermes satellite, a joint Canada/U.S.A. project, is particularly suitable for demonstrations in distance teaching. Dr. John S. Daniel describes a series of varied experiments which were conducted in Canada in 1976/77. Although each separate experiment lasted only a few months (or less), taken together the projects explored a wide variety of satellite uses.

In the past, satellites have been used primarily for video broadcasting. The Hermes experiments, however, involved primarily one way video and two way audio or, in some instances, an interactive video network. Thus we have a group-to-group pattern in contrast to the usual one-to-many format of broadcasting and the one-to-one relationship provided by the telephone.

The evaluation of the experiments is described briefly and an attempt is made to identify the conditions which must be satisfied if satellites are to make a significant contribution to distance education. Also summarized briefly are the results (a) of a study on the costs of setting up operational satellite networks and (b) of a needs survey conducted among Canadian educational institutions. Considering that few of these institutions are active in distance education, the level of interest is surprisingly high.

Communication satellites are the most useful innovation to have arisen from man's conquest of space. They can render telecommunications costs independent of distance and make it possible to set up rapidly new networks covering wide areas. The Hermes satellite was developed for the Canadian government in order to test two technical improvements. First, the satellite operates in the 14/12GHz frequency band, which avoids interference with terrestrial signals, and second, by transmitting at higher power than any of its predecessors, it enables inexpensive and movable ground terminals to be used.

The satellite and a selection of terminals were made available to Canadian institutions in 1976-77 to explore social applications of this new technology.

Several of the demonstration experiments carried out used the satellite to overcome distance for educational activities. Since air time was limited and the terminals few, these projects were neither scientific experiments nor feasibility studies, but rather exploratory demonstrations. The Canadian government is offering longer periods of air time on the Anik B satellite to institutions which wish to go a stage further and mount a pilot project.

THE EXPERIMENTS IN BRIEF

We shall now summarize the Hermes educational experiments in telegraphic style:

1. **Carleton-Stanford**

   Exchange of graduate courses between two universities. One way video and two way audio communication between two sites on alternate days for 4 months.

2. **Memorial University**

   Continuing medical education courses for physicians and nurses involving one way video from St Johns, Newfoundland, with return audio from the four receiving sites. Alternate days for three months.

3. **Public Service Commisssion**

   A five point interactive video network for management training of civil servants, using non-directive learning. Alternate days for two months. Also several interactive video seminars involving two sites.

4. **Montreal - Stanford Telecolloquium**

   A two day colloquium on the use of satellites involving 3 interactive video sessions between Montreal and Stanford with accompanying simultaneous translation.

5. **University of Québec Omnibus Network**

   Terminals were used in a variety of configurations for a series of short demonstrations.

   5. 1 **Electron microscopy**

   Discussions between researchers at up to four points. One way video enabled all to observe microbiological specimens shown live in an electron microscopy and two way audio allowed debate on identification of viruses. Alternate evenings for two weeks.

5. 2 Supervision of teaching practice

Two way video and one way video/two way audio used between two sites to permit interaction between teachers and university staff supervising a project. Occasional days for one month.

5. 3 Access to libraries

Two projects. The first, using two way audio with later a one way video link, allowed students to interview a librarian in order to choose reference material. The second, using audio only and a terrestrial facsimile link, allowed students to request copies of reference materials to be sent to them. Alternate days for one month.

5. 4 Telelectures

Brief experiments with two intensive courses. Part of a graduate course in public administration used a classical lecture technique (two sites) whereas an undergraduate course in labour history used a more interactive style (five sites). One way video/two way audio. Both experiments lasted less than two weeks.

5.5 Intercom

Two way video link between community cable TV systems of two small towns. A large number of persons, from children to senior citizens, exchanged views on a variety of topics. Alternate days for one week.

5. 6 Teleconferences

One way video to some stations, two way audio for teleconference meetings of various groups.

COMPARISONS WITH PREVIOUS SATELLITE EXPERIMENTS

In comparison with previous projects, the Hermes series, as well as being shorter and more diverse, placed greater emphasis on interactive multipoint communications than earlier educational experiments such as the ATS-6 series where the accent was primarily on video broadcasting. The University of Quebec experiment in particular was conceived on the premiss that satellites permit the creation of a new type of communications configuration which is neither the one-to-many mode of broadcasting nor the one-to-one mode of the telephone, but rather a group-to-group structure. Experiments used both broad-band (video) and narrow-band (audio and data) links, although the asymmetrical configurations often found reflected the equipment available rather than a desire to test a particular theoretical hypothesis.

EVALUATING THE EXPERIMENTS

Evaluating the experiments was the joint effort of a team led by the author and the heads of the individual experiments. Our overall aim was to produce a model for the use of satellites in Canadian education. The experimenters also had certain of their own ideas to test. We therefore suggested a general evaluation framework derived from Stufflebeam's (¹) Context - Input - Process - Product model. We prepared several standard questionnaire and interview forms. These were administered by experimenters who became the first to analyze the data produced. Experimenters' reports are just becoming available at the time of going to press. The results presented here are therefore preliminary rather than conclusive.

RESULTS

1) Educational effectiveness

Since most comparative studies of instructional media have shown no significant differences, evaluating educational effectiveness was not an important objective in these short demonstrations. However, in the cases where comparisons could be made (Carleton-Stanford and Public Service Commission), learning occurred just as efficiently in courses given by satellite as in conventional courses.

2) Participant attitudes

Care must be taken before using attitude data generated in these demonstrations as a guide to user reaction in an operational system. From his analysis of participant attitudes in the University of Quebec experiments, Tremblay (²) has shown that the proportion of people who found the activities satisfactory and the equipment convenient was significantly greater than the proportion who would have liked to use the system on an operational basis. In the Carleton-Stanford experiment, student attitudes to satellite exchanges and the associated equipment were similar to their attitudes to other educational technology such as that used in Carleton's "wired city" laboratory. Both the Memorial University and Public Service Commission experimenters found that prior preparation of the participants had a major influence on their attitudes.

In summary, participants found the environment created by the satellite exchanges less congenial than face-to-face contact for the same purposes. However, to the extent that the satellite gave them access to activities which would otherwise have remained inaccessible, a large majority were happy to accept the constraints of the system.

3) What the experiments learned

Naturally the reality of each project was somewhat different from the experimenter's expectations. The Carleton-Stanford experiment showed that exchanging courses between institutions is administratively complex, quite apart from the satellite link, and requires constant coordination between sites to deal with a variety of problems (e.g. availability of textbooks, marking assignments). The Public Service Commission found that the *way students were recruited* had a major impact on their feelings for the course.

At the University of Québec[2]), *where emphasis had been placed on interactive multipoint communication,* participants nevertheless regarded the exchanges as similar to broadcasts with little possibility of joining in and influencing the course of the session. The Montreal-Stanford telecolloquium[3]) provided a reminder that it is one thing to organize a fluid exchange of comments between distant groups, but quite another to weld the various interventions into a meaningful discussion.

THE FUTURE OF SATELLITES IN EDUCATION

1. Assimilating technology

Satellite communication is based on complex technology and expensive equipment. Whereas individuals can dabble in some new educational technologies at little cost, satellites require a heavy institutional commitment. The Hermes experiments support Hooper's[4]) claim that assimilation of new technology in an educational enterprise is facilitated if:

(i) it answers a primary need;

(ii) it blends with technology in use and developments under way;

(iii) the personnel responsible are integrated into the regular institutional structure and properly trained;

(iv) the institution invests some of its own resources in the project and gives it high visibility;

(v) different departments collaborate in using the technology and transfer to the other institutions is easy;

(vi) the use of the technology is evaluated.

2. Costs of operational systems

Although governments are prepared to make new technologies available to education for experiments at little cost, it is a fair assumption that an operational system would have to pay at least the real technical costs. An attempt has been made[5]) to identify these costs for two hypothetical educational satellite networks in Canada. We extimate that *a network in* *which ten sites could emit video signals and another twenty receive them, with audio and data communication among all,* would require, for a system covering about 15 million square kilometres, an annual expenditure of some $3.5 million for the delivery system. (Space segment $2 million, earth segment $1.2 million, operations and maintenance $300,000.) *An audio (and data) network linking some 200 sites* spread over an area of 5 million square kilometres would have an annual cost of about $2.5 M or roughly $12,500 per site.

3. Do educators need satellites?

Although the costs quoted above are not large compared to existing budgets for education, there will be no move to make such investments and set up the inter-institutional organization required unless the result answers a clearly-felt need. Even were such networks created by a national policy decision they would, like much previous educational technology, wither on the vine unless there proved to be a need for them.

Fully aware that assessing needs and wants is a delicate endeavour, we have sought comments on the role of satellites from universities and government departments of education across Canada[6], [7]). Although many responses showed a healthy scepticism, most expressed the feeling that distance education would become of increasing importance in the future and that the contribution satellites could make merited further study.

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Using telephone and two-way cable TV networks for distance education

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Our present telephone network allows the exchange of both speech and data.

"Viewdata" combines the telephone network and the available TV set. A student can call in and read information instead of receiving printed matter by mail. He can answer multiple choice questions immediately and receive instant feedback. A central computer can store and retrieve specific information helpful to students.

Two-way cable TV has all the above advantages and more. It transmits quality still pictures and movies. Individuals can be formed into temporary groups which will talk with each other. Wide band transmission channels make it possible to send educational programs to "intelligent" TV sets. The sets allow a student to proceed at his own pace.

The author, a professor of educational technology, sees a promising future for the new electronic media. "In the long run," he states "a very positive cost-benefit ratio can result from an appropriate usage" . . . especially in the case of two-way cable TV.

1. Problems

Correspondence education asks for interaction between students and teaching systems. There are many traditional ways of feeding back information to students: personal, mailing, using the telephone.

In the last decades electronic networks in many countries have grown steadily, allowing more and more private households to have access to interactive information exchange. The cost-benefit ratio has decreased simultaneously.

Thus, we have to reconsider the traditional media approach of correspondence education. Television and broadcasting, as well as the mailing of printed material, are one-way media. They can be complemented by using new electronic media: the networks as well as central data banks, computer-aided learning, conference settings in networks, etc. This will modify teaching and learning strategies and should improve the quality of distance teaching. However, we need new technical as well as new methodical ideas to put together and use this new media mix.

This introductory paper—and the discussion at the ICCE Conference—will give you some idea of what might be possible and the consequences of setting up new systems, particularly in the area of continuing education.

2. Technical aspects of existing and developing networks

Presently we have, as standard services in most countries, telephone networks which allow both the exchange of speech and data transfer at rates in the range of 120 to 9600 bits/sec. For our purposes the exchange of spoken words as a support or an integrated part of correspondence education is well-known and used in many institutions. However, there is little usage of alphanumeric text transfer, with the rare exception of computer-based learning using central computer systems. The reason is the expensive hardware (at the users end) which is necessary to transfer alphanumeric information. Electric typewriters as well as modems or special cathode ray tubes have been used widely until recently to allow students access to the network.

The development of *Viewdata* in Great Britain—in Germany called "Bildschirmtest"—eases this technological obstacle by combining the telephone network and the already available TV-set via inexpensive interface. A simple keyboard allows the user to send his messages into the network while watching input and responses on his TV-screen.

The British, the German, and other European Post Offices are going to offer access to a net of local data banks and interactive computer systems with this technology within the next few years. Thus, in the early eighties, everybody having a telephone and a TV-set already and adding the appropriate but inexpensive interface will have access to relatively large data bases (about 100,000 "pages" per local data bank on the screen in the German system). Computer-based learning programs can be made available via the network control computer programmed by the institutions offering distance education.

The German Post Office had given some preliminary ideas of the cost of using the Viewdata. Installment will be at about $100 per user, monthly rates about $4, plus time-dependant charges for dialling into the network, these charges will be about the same as for local calls.

A second system developing world-wide—*two-way cable TV*—will give much more flexibility. Here we have a network of wideband communication, allowing about 30 channels (downstream or upstream) and additional narrow band two-way alphanumeric interaction per cable. Presently there has to be a central installation allowing the distribution of audio-visual information as well as giving access to computer facilities which control the network.

The present usability of such systems is limited because only a small fraction of households is linked to wide-band cables (in the western industrialized countries in the order of 10% to 25%). Only pilot installations allow truly interactive usage of the system. However, there is a strong trend towards hooking more and more households to cable networks and improving the interactive usability. In

Germany we will have at least two larger pilot projects, including 10,000 households each, experimenting with the two-way cable possibilities.

3. Viewdata and education

A spread of the *Viewdata* system will have several serious impacts on correspondence education:

(1) Instead of receiving printed material, a student can call in and read the selected information important to him.

(2) A student can answer (at least multiple choice) questions immediately and his response will be analysed directly by the central system, causing appropriate feedback within a few seconds. This will allow him to recognize errors and "back up" or continue on with his lesson.

(3) By storing and retrieving information in a central computer, the correspondence education institution can give any student help quickly and specifically.

(4) Costs can decrease since the expensive distribution of printed material can be reduced. Learning efficiency should be improved.

Summarizing, *Viewdata* will bring a new dimension to distance education. It should be considered seriously. But intensive experience and research seem to be necessary to understand the full impact of this medium.

4. Two-way cable-TV and education

Viewdata offers only a piece of the full range of information. Audiovisual information of video- or HiFi-quality can be brought directly only to students using wide band cables. We anticipate two-way cable TV combined with central computer facilities in pilot projects soon. Look for decentralized, "intelligent", microprocessor-supported television sets in the later eighties. Two-way cable-TV can bring all the advantages of *Viewdata* listed above. In addition it will give these further opportunities to students:

(5) It is possible to view high quality still pictures and movies.

(6) The network can be organized in "subsplits" in such a way that groups can be formed temporarily. Individuals in such groups can talk to each other. From several points of such a "subsplit" network, it is possible to insert audio-visual information, i.e. the face of a tutor working with the group, a movie asked for by one of the participants, etc.

(7) Having wide band (about 5 MHz) transmission channels available will make it possible to send educational programs to an "intelligent" TV-set which allows a student to use it at his own path and speed. Without interaction to central points, use of such a set will avoid the "big-brother-is-watching-you-effect."

Presently we have very little experience in using two-way cable TV in education. We hope the pilot projects in Germany, beginning in the early eighties, will bring more experience and data about the use of this medium by larger groups. Some current international projects at least indicate that this system will be a very promising extension of our possibilities in education.

5. A course as an example

Presently an experimental two-way cable TV system is running in Berlin at the Heinrich-Hertz-Institute. This mimics most of the features of a network and its facilities. *At the ICCE conference there will be a short demonstration of a course designed experimentally for this system. This demonstration will offer a chance to watch the system working with students and will give a first impression of possibilities.*

6. Further trends in using new media

In the next decade we will have three competing technical developments which will influence correspondence education:

- *Viewdata,*
- Two-way cable-TV
- the distribution of "intelligent" home systems composed of TV-set, microprocessor, videodiscs, keyboard.

All three systems can and will be used in education. It will depend mainly on local and political decisions how far network developments will go and what level of population coverage will be reached. It seems important to keep standards high, thus allowing people access to information in an interactive way. However, it seems very likely that autonomous "intelligent" home systems will allow for many educational goals and therefore might be a more attractive alternative for students.

One problem of distance education will be solvable in the future: feedback and quick response. Technical developments in telecommunication on the one side and the improving quality of the computer on the other side will make this possible.

Costs for these new media will be a problem for some years to come. In the long run, a very positive cost-benefit ratio can result from an appropriate usage of the three systems, particularly two-way cable TV.

7. Literature

Recent literature in the field will be distributed at the ICCE conference. Three areas of research and development will contribute: *Computer-based learning, audio-visual media* and the present *usage of the telephone* in correspondence education.

Why not a Correspondence Course for Correspondence Tutors?

Erling Ljosa, NKS (Norway)

If you dont know Erling Ljosa already, read the biographical note under "What are we doing in Research?".

> *Is an effective classroom teacher automatically an equally effective correspondence teacher? Probably not! Are a few kindly words to teachers about "what to do" and "what not to do" an adequate introduction to correspondence teaching for the experienced classroom teacher? Usually not! But suppose the school has a substantial teachers' manual which discusses "your tools, your guide lines, your students, your techniques" and includes student evaluations, is this enough?*
>
> *Well, at least it is a good start. Cautiously, you might go a little further and ask the beginner to write out model answers to all the questions asked of students. A senior tutor or instructor would then review those answers and comment.*
>
> *But four northern European correspondence schools decided that all of the above is not enough. Working together, they began to develop separate correspondence courses for correspondence teachers on how to teach correspondence courses. Three schools have nearly completed the preparation of these courses. The paper which follows gives us some insight into the philosophy and scope of this worthy pioneer undertaking.*

For many years correspondence educators have shown a considerable interest in how to make good correspondence courses. That interest is about to become broader and more fundamental. The problem to be investigated is how to give good correspondence tuition (instruction) - and that includes both the course material and the work of the tutor.

In order to prepare new tutors for their job, we usually have a talk with them, and give them written instructions on how to correct students' assignments. During their first months of work they are supervised by a senior tutor, who discusses with them their manner of correcting assignments.

Naturally, opinions differ to some extent regarding the characteristics of a good tutor. Experienced correspondence educators tend to stress motivational factors; the personality of the tutor and the relationship between tutor and student (Bååth & Wångdahl 1976, pp. 19-20). A series of interviews with staff tutors at the Open University also lead to the conclusion that personality, warmth and understanding were the most important factors making a good tutor (Gibbs & Durbridge, 1976).

The two Norwegian correspondence schools (NKS and NKI) have made an investigation to find out what the students themselves judged to be good and bad treatment of their assignments. We asked our students to recall and describe examples of very good and very bad treatment. The descriptions were gathered by means of a postal questionnaire; 122 NKS students and 18 NKI students returned the questionnaire.

The analysis of the students' responses shows that the students want

- thorough and instructive comments
- personal and encouraging comments
- legible comments
- quick response from tutors.

Many of the students stressed the importance of comments which really explain what is wrong in the students' solutions; they asked for more thorough comments from the tutor.

As a result of this investigation and other views on correspondence tuition, we are now in our training of tutors stressing **four main tasks for the tutor:**

1. to control and correct
2. to explain and guide
3. to encourage and support
4. to evaluate

To underline these tasks we use some of the students' descriptions and statements from the investigation mentioned above.

Control, correction and evaluation are tasks that first of all demand **subject knowledge.** The tutors already have this knowledge, and therefore it is rather easy to train them in sound correction techniques. Evaluation is often somewhat more "tricky", but it is also fundamentally based on subject knowledge. By far the most difficult tasks for correspondence tutors - although the tutors are not always aware of it - are to explain, guide, encourage and support. These tasks are not so much based on subject knowledge as on the ability to feel and understand the learning problems and deficiencies of the individual students.

In order to foster a deep understanding of the students' needs, we decided to train our tutors by means of **a correspondence course for correspondence tutors.** We thought that the best way to help our tutors to understand what it is like to be a correspondence student would be to make them correspondence students.

Through the correspondence course we not only tell them, but demonstrate to them how correspondence tuition works. After the training period the tutors will know how it feels to work through a series of study units at home with exercises and assignments, how it is to wait a week or two before receiving the tutor's comments, and how the tutor's comments influence their motivation. Later they have the opportunity to discuss the comments from their tutor, as well as their own first attempts to give tuition by correspondence.

The idea of making a correspondence course for correspondence tutors was discussed at a workshop of the European Home Study Council in May, 1976. The Swedish school Hermods and the Norwegian NKS had then already agreed to cooperate on such a course. After the workshop we were joined by the Norwegian NKI and the Finnish Markkinointi-instituutti.

These four schools did not want to make one common course, but to keep in close contact during the development phases, exchanging ideas and drafts for sections of the course. The result should be four individual courses, with a common approach and individual variations according to the different characteristics of the four correspondence education systems involved.

The Hermods course has been postponed; the other three will be completed and put to use in 1978. Further details can be given in New Delhi.

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Writing readable correspondence courses -- feedback that helps!

Rick Powell,
Lesotho Distance Teaching
Centre (Lesotho)

A writer of correspondence courses is faced with a dilemma. On the one hand he is forced to anticipate the needs and difficulties of students. By some sort of magic he has to set up a system of priorities; he has to decide which topics need to be approached slowly and carefully and which can be dealt with quickly. He also has to choose, among many possible approaches, the best way of teaching the topic. If he misjudges, there is little opportunity to rectify mistakes until the course is revised.

On the other hand, the course writer has very little information with which to anticipate the situation. Experience in classroom teaching helps, but what works in the classroom may not work with self-instructional material.

In short, the course writer is starved for useful feedback. He wants to know how well students can learn from his lessons, but there is no automatic way of finding out in advance. This paper is about practical ways in which a correspondence school can help course writers by supplying a limited amount of feedback when it is needed most -- when writers are beginning to write a new course or revise an old one. The Flesch reading ease score, the cloze test, and monitoring an existing course are discussed.

A. Readability measurement

It is an established maxim among correspondence course writers and editors that lessons should be written as simply and clearly as possible. This is always desirable. But it is even more important in developing countries where the language of instruction is the second language of students. Writers use their own judgement to assess the readability of prose, but they often wonder if their subjective judgement is enough. In these cases an objective measure of readability may prove useful. Readability measures do not replace the writer's own assessment, but they can refine it. Two popular measures of readability used at the Lesotho Distance Teaching Centre (LDTC) are described here.

1. The Flesch reading ease score[1]

The Flesch reading ease score is a reliable and easy-to-use method of determining readability in English. Research on readability has shown that readable prose contains easy words and easy sentences. In English easy words tend to be short words and easy sentences tend to be short sentences. Briefly, the

Flesch method requires the selection of five passages from a text, each passage about a 100 words long. First, the exact number of words are counted. Secondly, the number of monosyllables and the number of sentences are counted. The number of monosyllables per 100 words and the average number of words per sentence are then calculated. Finally the reading ease score can be determined from the following formula:[2]

R.E: Score = 1.599 NOSW - 1.015 sl - 31.517

where: NOWS refers to the number of single syllable words,
sl refers to the average sentence length

Reading Ease scores range from 0 to 100. The easier the reading the higher the score. Look at the following two examples:

Look at the picture on the right. The raindrops hit the soil. The particles are disturbed and they become loose. When the surplus water begins to run off to the stream or gully, it takes the loose soil particles with it.

(From: Agricultural Science, Book 3, LDTC, 1977.)

The Reading Ease Score is about 8O.

The project for evaluating specific aim social action programmes has always been more sanguine. The more specific the goal of the programme, the more consensus there will be among decision makers, researchers, and programme administrators on the measures that can be taken as signs of the failure or success of the programmes.

(From: P.H. Rossi and W. Williams (eds), *Evaluating Social Programmes,* 972.)

The Reading Ease Score is about 30.

This method is easy to use and doesn't take a long time. For example, it would take less than an hour to calculate the readability of a correspondence lesson. But a few cautionary notes should be made.

1. The method was designed for passages of continuous prose. Often correspondence lessons do not contain long passages of prose (this is particularly true in mathematics). In such cases the method does not apply so well.

2. If you assess a draft lesson and it gets a low score (in the 50's or below), this does not mean that it has to be simplified. Some courses necessarily involve the use of big words. If they are the right words to use, leave them in. The measurement is only a tool. If it helps use it; if it doesn't don't.

3. If you decide that the lesson has to be simplified, it does no good to chop sentences in half and substitute a short word or two for a long one here and there.

This is a mechanical means of pushing up the reading ease score; it doesn't mean that your passage will, in fact, be more readable. It's best to start from the beginning and think again of how you might approach the topic more simply.

4. The readability measure may not work in languages other than English. For example, we tried using it in Sesotho and the test didn't discriminate between passages at all.

2. The cloze test

The cloze test was developed by W.L. Taylor in the early 1950's. Since then it has gained increasing popularity as an excellent measure of readability and comprehension. The best way to explain this procedure is to give an example. Try it yourself. The answers are written at the end of this paper[3]

The passage below has a number of words missing. Try to fill in the word that goes in each blank. If you are not sure, guess. There is no significance to the length of the blanks.

> The primary..........of this study was..........select a set of
>
> ....passages covering a wide..........of difficulty and
>
> ....calibrate these passages for..........by means of the
>
> ....technique.[4]

How to do it

A brief description of how a correwpondence lesson might be pre-tested using the cloze technique follows. It is meant to give the reader an idea of what is involved and does not pretend to be complete. If you wish to use this technique I suggest you refer to the literature on the subject and make up your own mind on what to do. There are a number of short articles which give practical suggestions.[5]

1. Select three or four passages from a lesson. The passages should be between 250 and 350 words long. Select the passages randomly; passages which are thought to be typical may not in fact be representative.

2. If the lesson is not written in the mother language of the students, leave the title, first sentence and the last sentence of the passage intact. *Delete every seventh word* in the rest of the passage. Make about fifty deletions. Some researchers have made only thirty deletions per passage, but, to my mind, this may prove to be small a sample.

3. If the lesson is written in the mother language of the students, leave the title and *delete every fifth word* of the passage.

4. Test each passage on about 30 people. You can test it on fewer, but you risk testing the passage on people who are not typical. No time limit need be set. The people in the test should be as similar as possible to the students who will actually

have to work through the lessons. For example, it would be senseless to test an academic paper on nuclear physics on primary school students. They aren't the intended audience. By the same token, testing a passage on secondary school students won't tell you much about how intelligible the passage will be to adults who have only a primary school education.

5. Mark the passage. Add up the number of right guesses and divide by the total number of blanks. Note: Synonyms are *not* counted as right answers, but minor misspellings of right answers are acceptable.

Now there is a problem. You find that the average cloze score of your lewson is, say, 46. Does this mean that the lesson is intelligible enough? Researchers are not sure about this point. Traditionally, educators have decided that a lesson is suitable for a student if he can reply correctly to 75 per cent or more of the questions asked him about the passage. However, this 75% score is both arbitrary and somewhat "rough and ready". You can ask easy questions about difficult passages and difficult questions about easy passages. In any case, the research done on this problem suggests that a cloze score in the low forties corresponds to the 75% criterion score. As a practical rule of thumb, I would suggest that if the cloze score is much below 40% the lesson will not be sufficiently intelligible to students. This 40% cloze score applies to English: it may not apply to other languages. For example, some preliminary research on cloze testing at LDTC suggests that it does not apply to Sesotho.

Advantages and Disadvantages

The cloze procedure provides a number of useful possibilities for correspondence colleges. However, it might be best to point out the advantages and disadvantages.

Advantages
1. It is simple to design.
2. It gives a very reliable and valid index of intelligibility.
3. Theoretically, it can be used in any language. So far it has been used successfully in languages as far apart as Vietnamese, Korean and Yoruba.

Disadvantages
1. There may be some trouble in gathering together 30 or so people who are similar enough to the prospective students.
2. In languages other than English there may be difficulties in arriving at a criterion score. Even in English this figure is a bit "dodgy".

B. Monitoring an existing course.

Most correspondence schools budget for a course life of five years. After five years have elapsed, it is time to re-write the course. Unfortunately, in many cases, the schools have no idea what was wrong with the first course. No matter how good the writer and how thorough the pre-testing, some lessons will be more successful than others. The following is a hypothetical example of a system that is used to monitor courses. At LDTC we have found it worthwhile.

The correspondence tutor (instructor) should be the central figure in any monitoring system. He knows best when students understand the lessons and when they don't.

At LDTC the tutors use a monitoring form roughly similar to the one shown below. The numerals are the marks, on a scale of 1 to 10, for each question (Q1, Q2, etc.) in *lesson 3 of a course in bookkeeping.*

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1st student	7	8	6	5	5	5	8	9	7	7
2nd student	6	8	6	5	4	6	8	7	7	7
3rd student	5	8	7	6	5	4	7	7	7	6
4th student	7	8	8	6	4	7	6	7	8	7
10th student	7	7	6	7	5	7	6	7	7	7

Separate marks are shown for each question as answered by ten students taught by the same tutor. It is immediately evident that *each* student found some questions less difficult than others. It is also evident that question 5 was consistently difficult for all the students whose grades are indicated above. Perhaps question 5, and/or the material on which it is based, should be rewritten.

After the tutor has recorded these marks on the chart, he records his own evaluation of the lesson material on the back of the chart.

Four different tutors will follow this procedure, using the same lesson. By the time the course is scheduled to be rewritten, LDTC will have detailed information on the progress of 40 students who completed the questions in lesson 3. This should be enough to judge the effectiveness of the lesson.

Note that these forms provide both subjective and objective information. Both types of information should be useful for writers and editors.

One final word. This task calls for professional judgement. Pay the tutors well if you expect the forms to be completed faithfully.

Notes

1. This section is a condensed version of a longer LDTC paper "Readability Measurement", LDTC, January 1977.

2. The reading ease score described here is actually a simplification of Flesch's original system. See: Farr, J.N., Jenkins, J.J., and Patterson, D.E., "Simplification of Flesch Reading Ease Formula", Journal of Applied Psychology, 35: 333-337, October 1951. There is also an easy-to-use table which

saves a bit of calculation.

3. Purpose, to, prose, range, to, complexity, cloze.

This passage was taken from: G.R. Miller and E.B. Colemen, "A Set of Thirty-six Prose Passages Calibrated for Complexity", J. of Verbal Learning and Behavior, 6, 851-854 (1967).

5. I have found: J.R. Bormuth. 'The implications and the Use of the Cloze Procedure in the Evaluation of Instructional Programs', U. of California (1967), and: G.L. Klare, H.W. Sinaiko and I.M. Stolurow, 'The Cloze Procedure: a Convenient Readability Test for Training Materials and Translations', Int. Rev. Appl. Pschol., vol 21, No 2 (1972), particularly useful.

How to edit teaching materials: a personal viewpoint

Janet Jenkins
International Extension College
(U.K.)

The National and International Extension Colleges

The colleges have their roots in the same movement as Britain's Open University.

In the autumn of 1962, Michael Young, now chairman of the International Extension College wrote an article and urged the creation of an open university to add to Britain's educational resources, then strained to capacity.

Nothing happened as a result of the article. So, a year later, Young established the National Extension College as a pilot for the open-university idea. When, in fact, the Open University was established by the British government in 1966, the National Extension College continued to exist, working at different levels and teaching different students.

Since its foundation in 1963, the NEC has received a steady stream of enquiries from overseas about correspondence education, or distance teaching. It tried to answer these as best it could, but the help it could offer the developing nations was quite limited - advising visitors or correspondents from overseas and providing courses to bona fide correspondence institutions when it looked as if these would meet their needs. While what the NEC could do was limited, the widespread interest in distance teaching in the later 1960s suggested that the developing nations saw it as a possible solution to some of the educational problems inherited from the colonial era.

A preliminary visit to Africa by Young in 1970 confirmed that there were jobs that an international agency committed to distance teaching could do. In 1971, with the aid of a grant from the Elmgrant Trust and the hope of one from the Ford Foundation, IEC was established. It now provides information and advice on distance teaching: the combined use of printed matter (usually correspondence courses), broadcasting, and face-to-face teaching. It is especially interested in the use of these techniques for nonformal education.

> *The above description of the colleges is essential to a complete understanding of Miss Jenkins' "personal viewpoint." In describing her plans for her demonstration in New Delhi she says, "I shall talk about the different stages of editing, first of all explaining each, and then taking a particular course as an example and telling how the processes worked out in this case, describing the problems that arose and how they were dealt with."*

Do we need editors?

This paper presents a personal view on editing. I learned the job from doing it.

For several years I edited correspondence courses for the National Extension College, Cambridge, England. The courses are for adults to help them pass examinations taken at school or to assist with less formal educational needs, from improving study habits to finding out about the history of one's locality. Some courses are linked with TV or radio, some have accompanying tape, slide or experiment kits, but the main medium of instruction at NEC is print.

When I started work there in 1966 the college was small and new - only three years old. It was breaking new ground in correspondence education in the UK in attempting to link correspondence and broadcasting, an entirely new venture in the UK.

Nobody was quite sure what an editor should be doing. My briefing was contained on half a sheet of typed paper. There was a genuine problem here. An editor is in a most unusual position. In normal circumstances a teacher is left to organise his lessons and teach in his classroom as he likes. He doesn't expect to have someone looking at what he is doing and commenting on it. But this is what the editor has to do when the teacher becomes a course writer. There is no set pattern of behaviour for this relationship between teacher and editor.

I found therefore that I often had to work out for myself what to do. I found, too, that there was always more and more to be done. The job seemed to grow relentlessly. It was always interesting and exhausting, always frustrating and rewarding.

What I found myself doing was accompanying each course from its planning through every stage until its delivery to students - and then on to assessing feedback so that the course could be corrected or revised. I could never sit back and think that my work on a course had finished , as the end of one phase was always the beginning of the next.

I am not going to describe here the whole process of editing*. There is no mystery about it; it involves hard work, good organisation and flexibility. Instead I am going to pick out those things which from experience are the most difficult to deal with.

Getting started

Course writers are usually experienced teachers but they are quite new to writing. Even if they are involved in the early stages of planning a course, they often have little idea of what is involved in writing for distance teaching. But it falls on the editor to give the writers the help they need.

First of all, there is the problem of *getting people to start writing.* Most writers of correspondence courses do their writing part-time, either as part of their normal job or in their spare time. Either way, they are generally hard-pressed for time and see course writing as subsidiary to their other work. Largely because of this, there are two things that can go seriously wrong. Many feel they can put off starting to write, but then they find it is harder than they had thought. A few go to the other extreme; they try to dash off the whole course immediately, and do it very badly.

Both these cases, the writers who can't get going, and those that go too fast, raise the question of training writers to do the job well. *All course writers need some training.* In practice the editor usually bears most of the burden of this, as he has the longest and most direct contact with course writers of anyone in a distance teaching institution.

The training of writers presents different problems in every situation. It can be approached in several different ways, sometimes in a writers' workshop, sometimes through face-to-face individual sessions, sometimes by correspondence. The type of training required depends very much on the previous experience of the writers. *The most difficult aspect is to get people actually to start writing as part of the training.* This is where a workshop is helpful; you can actually sit people at a table and insist that they get along. As they write, and you and fellow writers comment on what they have written, they will begin to realise the value of training. In other circumstances it is difficult to get this across.

People chosen as course writers are usually experienced teachers who know that their methods work well face-to-face. Often as they start writing they find it hard to adopt the step-by-step approach that is necessary for distance learners, or to appreciate the need to write in simple, non-academic language. The editor has to make it clear what is wanted while keeping the goodwill of the writer. This is often difficult. One has to offer criticisms and suggestions confidently, but tactfully.

I have found two approaches useful. As editor, I imagine myself in the position of a student working on the material. I tell the writer where I have had difficulty! The second approach is to try out draft lessons on a sample of students. For this pretesting, you need only a very small number. Subsequently, a full pilot version of the course will need a larger sample and rigorous evaluation. At this stage, you simply want to get an impression of student reactions, to validate any comment you make to the writer.

If you can get the writers to start along the right lines, you avoid most of the difficulty of editing. If they fail to grasp the principles of writing correspondence courses, you will have the long and unenviable task of revising or getting the whole course rewritten.

Getting finished

This often turns out to be even more of a headache than getting started. Part-time course writers frequently underestimate the time they will need to complete a course. An editor has to encourage them constantly to keep to schedule. Some writers prefer to be given a deadline for the whole course at once, but I have found that *you are much more likely to get the course on time if you ask for periodic batches of lessons.* But if a course writer persistently delays delivery of manuscripts there is little you can do beyond threats and encouragement. One way of avoiding this situation is to have regular one-day writers' workshops. This works especially well where several writers are working as a team on one course. For each workshop the writers are required to have ready the next batch of lessons and revised versions of those presented at the previous workshop.

Stamina

Editing demands constant attention to detail, both in the text and in the organisation of production.

Working on the text, you have to re-read each lesson again and again, making sure that content is well-organised, language clear, exercises sufficiently frequent, answers correct, instructions clear. It is all too easy to miss out on such details, to spend too little time going over each lesson. The last reading just before printing is particularly important. You are usually rather bored with the course by this stage; it is not easy to give it full attention. It is worth it, though, as this reading invariably reveals small points that you have missed previously.

Organising production is where the most pressure is. I'm not suggessting that the editor controls the whole course production process, but he has the most intimate knowledge of each course as it develops and it is therefore up to him to identify and deal with problems as they arise. He also has to co-ordinate the activities of different people involved in making a course. It is hard to do this efficiently, particularly when you are working on the development of several courses at once. But courses do not get produced without someone relentlessly coaxing all through the process. That person is generally the editor, the link between the writer and the print unit...The editor must have stamina!

Attitudes in editing

Perhaps the editor's job sounds like a tedious one, when you look at it from the angle of the problems. It could be, but I think it depends on the editor's attitude. The most important thing for the editor to do is *put the students first all the time. He needs to see himself in their situation: working at home, perhaps in conditions that are far from ideal, with a feeling of isolation, easly discouraged and blaming themselves rather than the college if things go wrong.* It can help to become a student yourself, to study one of the courses offered by your college. I did this, and though like many students, I dropped out about half way through, the experience brought home to me, among other things, the importance of accurate details in correspondence courses. It also helps to meet and talk to as many students as possible.

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*For a detailed account, see Janet Jenkins, **Editing Distance Teaching Texts,** IEC Broadsheets on Distance Learning, No. 9, International Extension College, Cambridge 1976.

How a teacher should respond to a lesson submitted by a student

(A teacher should do more than correct a paper; there should be personal dialogue.)

Elias Pereira
Stamford College
(Singapore)

"The essence of correspondence education is effective personal dialogue between tutor (teacher) and student," according to Elias Pereira. "The student's most important contact with the college is through the lessons which he submits from time to time and the queries that he may be prompted to make.... The tutor should correct the student's work as he would wish his own work to be corrected."

Several distinctive features of Stamford College expectations should be noted. All corrected lessons and answered queries are be returned within 24 hours. All spelling errors are to be corrected.

Students are encouraged to ask questions through a separate home tutor query form.

Tutors are provided with examples of both "good corrections" and "poor corrections". The most obvious difference between the two is that the "good corrections" provide more than corrections -- "reasons why" are given and other dialogue is included.

Some examples of "good corrections" from outside Stamford College are included in this article.

Quality control is maintained by an inspection of all corrected lessons from new tutors and a sampling of lessons received from other tutors. The tutor evaluation form rates teachers on 13 different aspects of quality of marking and ability to motivate students.

If proper procedures are followed, Mr Pereira points out, "the correspondence student can be expected to receive as good an education in a school without walls as he would in the traditional wall-bound institution."

The submission of the first answer script (written lesson) to the college is the first dialogue between a correspondence student and his tutor. The typical student submits his first lesson with a good deal of enthusiasm. His first attempt at dialogue with his tutor should be reciprocated in the same manner.

Each day the tutor may be correcting first answers from several different students. But each answer must be an individual communication to an individual student. The tutor should make a serious effort to know each student, his level of understanding, his previous knowledge of the subject, his interests, his weaknesses, his strengths so that the tutor/student relationship can lead to positive interaction.

Dialogue takes place as the tutor responds to the student's paper in a variety of ways. Corrections alone are enough. "Reasons why" must be given, questions asked to stimulate thinking, additional facts or ideas provided. Dialogue is also stimulated by the use of the Stamford College home tutor query form. The form states "I am having difficulty understanding..../ It is covered in lesson.... on page...." The form also provides space for a short essay on "My problem is...."

The query form is sent to each student along with his first batch of lessons and subsequently as requested. Although it is generally assumed that students taking correspondence courses are entitled to write to their respective instructors without using a form, the forms are an added incentive to further dialogue with the tutor.

The tutor's objective (as he reads a paper) is to maintain marking standards and to motivate his student at the same time. He should welcome new students and make tactful and encouraging remarks. If the tutor has previous marks of the same student, he should use those marks as a basis for comments on the lesson now being corrected. ("I am pleased to see that you are doing much better this time in organizing your paragraphs.")

Some excerpts from the Stamford College tutor's manual show what the College expects of its tutors.

Excerpts from the Stamford College tutor's manual (Emphasis has been added)

Preparation for Marking

Before you begin your marking, you will want to familiarize yourself with the course for your particular subject. Familiarize with the model answers given, and wherever no model answers are given, make your answers as complete as possible to help you in the marking. Be sure you have specific references for each question so that if a student makes a mistake in a question you can refer him to the proper page in the lesson. It is important that the tutor knows the content of the textual part of the lesson so that he will not require too much or too little of a student.

The main purpose in marking a lesson is to *teach*, and *not to assign* a grade.

Method of Marking

All corrections must be made in RED, preferably in RED INK.

Check each paper carefully giving helpful corrections sufficient to make everything clear to the student. These should be written in clear spaces on the student's papers, or (if lengthy) on separate Tutor's Memo Forms.

Write always horizontally, never up and down the margins or across corners, and NEVER on top of the student's own writing.

Students often write long descriptive answers, which waste their time and of course yours. They should be told to confine any descriptive answer to not more than a specified number of words (using sketches where necessary). This applies very strongly to examination course students.

Every care should be taken to avoid defacing students' work unnecessarily. Errors should be lightly and neatly crossed out, and the corrections written in blank spaces; THEY MUST NOT BE WRITTEN ON TOP OF THE STUDENTS' WRITING. *If the student does not leave a line or so vacant after each answer, ask him to do so in future - a 'crowded' paper is difficult to handle.*

Only brief corrections should be written adjacent to answers; if lengthy remarks are needed, they should be written on a Tutor's Remark Sheet.

Errors in calculations should NEVER be corrected by altering the students' figures; these should be lightly crossed out and the corrections written adjacent.

Hastily written corrections that are hard to read inevitably lead to COMPLAINTS: care should be taken to make them LEGIBLE.

In lessons on English Grammar, Composition, Literature, etc. *all* spelling errors are to be corrected. In other subjects, each mis-spelt word is corrected the first time it occurs. This applies to lessons in non-examination courses. In examination courses, where spelling is more important, use your own discretion, but warn any student who appears to be weak in spelling.

All criticism and advice must be COURTEOUSLY expressed, as the written word is very liable to give offence. Such expressions as 'obvious' 'very careless', 'ridiculous', etc., must be avoided as they lead to *complaints* which involve loss of time and needless expense. HOWEVER STRONGLY YOU WISH TO POINT OUT THE SERIOUSNESS OF AN ERROR, DO SO *POLITELY* AND *HELPFULLY*.

Students' answers should be in their own words. If they appear to have copied to any extent from the Stamford College model answers or lessons, you should tell the student to use his own words. Also remind him that such reference facilities will not be available in an examination hall. In extreme cases, explain that a low grade has been awarded becuase we cannot be expected to correct our own model answers. This is preferable to accusing the student of copying because many students do memorize extremely well.

The work should be corrected **AS YOU WISH YOUR OWN WORK TO BE CORRECTED**, and you should cultivate a sympathetic insight into the students' difficulties so that your comment is helpful and encouraging rather than mere negative or passive criticism. Remember that students only see what you actually write on their work, so let this be sufficient to show them that each page has been carefully examined.

Deal with all work strictly in order of receipt. Do not put difficult or awkward papers aside for later consideration.

Letters or separate queries should be answered within 24 hours of receipt.

Spelling, Punctuation and Grammar

One means of teaching is by example. Therefore, we ask tutors to write as plainly as possible, to be careful of their spelling and grammar, and to use complete sentences. Please avoid the use of abbreviations so that there will be no doubt in the student's mind as to what you mean.

We also expect a tutor, *no matter what subject he is teaching, to correct the student's spelling, grammar, and punctuation.*

Remember at all times that nothing should be returned to any student which is likely to destroy his confidence in our service. *All his work has to be returned to him.*

Do not tick (check off) every sentence or paragraph. It is sufficient to tick major items, and at the end of each question, but COMMENT should be made wherever there is an error or omission and *some* comment (even if only general) should appear on *each* answer in descriptive work. *Every* paper must bear some comment; poor papers require a great deal. A general comment (on the paper as a whole) is expected.

Tutors are provided with examples of both "good corrections" and "poor corrections." In the sample "good corrections" herewith, note the friendly tone of the instructor's brief comments, the spelling corrections, and the tactful way in which the tutor points out that the student means "They would not let me go" when he said just the opposite -- "They let me go." In one instance the tutor changed "is" to "was" and explained *why*. Although tense is mentioned in two comments, the tutor reinforces the point in a summary remark at the end of the paper. (See sample.)

The tutor who prepared the sample "poor corrections" was energetic in changing tense, correcting spelling, and pointing out some other errors, but did nothing to set up a friendly dialogue about the essay on a big fire. The student had something interesting to say, but unfortunately the tutor said nothing interesting in return. Nor did the tutor explain why the various changes were made. (See sample.)

(Note: As it is not possible in the following printed samples of 'good' and 'poor'

POOR CORRECTIONS on Answer Script

Part - 1

Fire! Fire!

While I was sleeping at night and had even gone into ~~the~~ a dream I heard ~~the~~ a voice shouting very loudly, which ~~waked~~ woke me up ~~in~~ from my dream. When I heard people shouting Fire! Fire! I quickly jump~~up~~ out ~~of~~ of my bed and open ed the window of my room.

When I open ed the window, I saw the yellow flame burning towards the the sky at my neighbourhood, the whole world burst into flames. The fire spread very fast among the atap houses. All the neighbours ~~are~~ were busy~~ing~~ collecting water to spray it on to the fire, but the fire ~~spray~~ spread even more quickly by the help of the wind ~~blowing~~ which was quite strong.

The women and all children~~s~~ ~~run~~ ran out of the house and many people are were helping each other to take out clothes and other important things and to safe the life of the victims but unfortunately there are were theifs stealing the things away leaving the victims with only a piece to wear.

Policemen and the fire men arived half an hour late. They had most probably lost thier way. It is was too late for them to put off the fire, most of the houses had been burnt off leaving the ashes behind.

All the fire victims ~~are~~ staying at the houses were provided with accomodation by the government until their houses are being built. All the victims are were looking very sad~~ly~~ ~~and having the sleepless night.~~

GOOD CORRECTIONS on Answer Script

Full stop should not be used here. Sentence is not complete. Use a comma.

ran® - Use the past tense here.

a bush, many bushes

Betrayal by a best friend.

After the school broke off⊙ I went back alone. Just as I crossed the road and turned to a small hut near by, Ah Sing called me loudly and run ran® towards my way. We walked and charted Sp. chatted together. Suddenly, three big, tall ugly man men jumped out from a bush~~es~~ and stood in front of me. One of them grabbed hold of me then they tied my hands behind my back and pointed a dragger Sp. dagger at me. I wanted to shout for help~~s~~ but I failed. As I turned round, my best friend Ah Sing, is was no longer with me. He is was quite far away, stood standing there and staring at me. He seemed to be happy and showed me his smilling Sp. smiling face.

Use the past tense since you are describing what happened in the past

At this moment, I felt uneasy. I realised that he had betrayed me. Although he is my best friend, he had done this to me. ~~Just as I thought of this~~ I felt very angry ~~in time,~~ about this. One of the man men pushed me into the bushes. He took my watch and all the money I got in hand had with me. Then he walked away. He talked to his friend about how to kept keep me inside their small hut. They would not let me go away unless my parents paid a big sum to them. After a couple of minutes, he put me at the back pad seat of a motor cycle. He brought took me away to a strange place. (which is new to me.) (I have never been to this place before.) ~~Due to my surprised,~~ They put me in a small hut at the top of the mountain. It is was really a very dark place.

Be careful of expressing the correct idea!

You could replace the phrase by one word, "strange".

You must be careful of your tenses. When describing events of the past, use the past tense. Your performance will be much better.

SS.

corrections to differentiate between the biack ink of the student and the red ink of the tutor, the typescript represents the students' work and the handwriting the tutor's corrections.)

Examples of comments made by Stamford College tutors

Good Summary Comments

1. You make many grammatical errors in the following areas:
    a) Neglecting to use the definite article "the"
    b) Neglecting to put "s" on a word for the plural form.
    c) Incorrect use of verb tenses.

    Please correct these errors!

2. You have many good ideas regarding the role of parents in preventing (or inciting) drug addiction in children. Your mark would be higher, however, if your grammar and word usage were better. Pay attention to singular and pural forms of nouns and verbs. Note the corrections I have made and try not to make the same errors again.

3. Although you are not lacking in ideas you must take particular note of:
    a) Your tenses - correct use of verbs.
    b) Spelling
    c) Appropriate choice of words.

    Take note of the mistakes and do the corrections by yourself.

Informal Comments

1. Although "women's lib" is gaining momentum and world-wide attention, I am indeed happy to learn that there are "old fashioned" men like me and "boys" like you who still believe that the "fairer sex" should be given special attention. Hooray to you!

2. Agree, but it is also important to have personal goals and company goals to be in agreement with each other.

3. Kong Khoon - Good work, keep the study up!!

4. Sun Leyong - Read the question again. Your answer is very good but is not related to the question. The question does not ask how you distribute the work but rather under what principles or maxims you would organise the workers.

5. A very good attempt. Don't worry too much - see the Model Answer - it is unlikely that you will come across these phrases very much in practice.

Stern Comments

1. The word 'scene' appears no less than twenty times in the Scheme of Lessons and twenty-two times in Lesson 1. Why, then,are you so carelessly unobservant as to spell it 'scence'? God gave you two eyes and a brain - use them!

2. Never do something just for the sake of doing it. Good work can only be accomplished with "blood, sweat and tears", I mean, by hard work. I look forward to seeing a better effort from you. You know what! My summary comment appears longer that your "essay".

A long comment for a short essay

1. I don't think you intended to write such a short essay. It is not that you lack ideas - from what you have written I guess that if you had stretched your imagination a "bit" you could have come up with more ideas and facts on the subject. What you have written appears more like a summary of the actual essay. You could have written:
   a) about the 'pandemonium' caused by the fire - people rushing, screams, shouts;
   b) what the people did to put out the fire - how the firemen fought the fire;
   c) the extent of damage.

Some examples of "good corrections" from outside Stamford College

(a) Very personal/or informal comments are sometimes effective. Here are several examples:

"I think you did an A-1 job as usual. As I've written before, it has been very pleasent going over your work. Good Luck. Don't worry about the final exam. You should really 'sock it.'"

"Your work is good and I am interested in the note about yourself. Did....High make you leave or did you leave because you don't live in....any more? .....has a program for young married girls."

"No kidding! Do you really follow the stock market? That's great! Have you heard of the book *A Teenagers Guide go Wall Street?* Perhaps you can write one of your essays about stocks."

(b) Summary comments are always in order. Here are two summary comments:

"Esther, we had a little trouble in these problems. In R equals P divided by B, B is the Base. By Base the book means the place from which you start. B is like Air Base where the planes start from.
"In example 1, 15 is what % of 60? You should start with 60, therefore 60 is the Base. Now we might say what part of 60 is 15 or 15/60 or1/4 or 25%.
"Another key word is "of". Any number following this word is always the Base." (End of comment.)

"On the whole this is a good beginning: you have the ability to get quickly to the heart of the answer; and you have a basic grasp of expression with a willingness to use you own phraseology rather than rely on the (history) book; you have an appreciation of facts as demonstrated by your answers. This all represents a sound foundation. By way of general criticism I would suggest that

- you try developing your paragraphs a bit more -- they constitute now the bare essentials.
- you watch diligently the mechanics of writing (spelling, punctuation, capitalization).

Concentrate on these two elements for the future. Your mechanics obviously need much work, but with a sentence or two of elaboration your paragraphs could easily become more effective. Also I am sure that the material will become more interesting." (End of comment on a history lesson.)

(c) Longer comments are desirable for special purposes. The first example below is a stern but friendly comment to a failing student.

"Sally, this is a nice example of a house for your project and here and there you have selected some interesting bits to make a home cozy and colorful, BUT you have not carried out the assignment as it was suggested. You should follow the directions very carefully and actually go through the house room by room.

"Make a floor plan of each room on ¼ inch graph paper. It is easier for you and it is more accurate. It helps you to avoid making a baby's crib bigger than a piano. You should actually measure every single item to be sure it is the proper size for the place you intend to use it.

"Sally, you must put a great deal of planning into this lesson if you expect to learn anything from it. It's O.K. to cut a few pictures and paste them down, but the *real value* of this kind of lesson is going through all the needed planning to make a home *attractive* and *useful* to all members of the family. Furniture styles and colour schemes should be co-ordinated and harmonious.

"You have more ability than you have displayed here. Please return this entire lesson revised and improved just as soon as possible. Good Luck." (End of comment.)

Here is *part* of a long comment in Geometry; it was written for a student who will profit from the extra attention.

"Part II, No. 3. It is understood that any statement of fact standing alone requires proof just as if it were a theorem.

"Part II, No. 4. This problem is so simple, how could you miss it? All it takes to get triangles similar are a pair of mutually equal angles. Angle FAC and angle APC are measured by equal arcs, hence equal. Angle APC is equal to itself. Hence the triangles are similar.

"Part IV. Never use numerical symbols in proofs. What may be true of one set of numbers may not be true of another. A proof must always be in general terms so that it covers all possible situations. In this case all you had to do was to state that

1. Triangle ABC is similar to Triangle GDF.
2. Angle A = Angle D
3. CH perp. AB; GE perp. DF
4. Angle CHA = Angle GED
5. Triangle CAH is sim triangle GDE
6. CA/GD = CH/GE (The end)"

(Triangles ABC and GDF were shown in the original comment.)

Quality control in marking is exercised by a routine inspection.

All corrected papers are inspected in the case of a beginning tutor; later only selected papers are inspected. Any slackening of quality in marking or slowness in returning papers or queries is dealt with by the Registrar; he writes to the tutor, requesting greater care and more individual attention. This usually keeps the tutor on the alert. Once the proper work ethic has been instilled in the tutor, a high standard of correction and service is maintained. The tutor evaluation sheet herewith illustrates precisely how the tutor's work is evaluated.

Our computer corrects student papers and writes individual personal letters to each student

John A. Bååth,
Hermods Skola (Sweden)
Nils-Ove Månsson,
Hermods Skola (Sweden)

CADE - a system for Computer-Assisted Distance Education - was developed at Hermods in Malmö, (Sweden). The final stage was in collaboration with Norsk Korrespondanse Skole in Oslo.(Norway).

In CADE, the correspondence instructor's work is to a great extent taken over by the computer. The system analyzes the students'answers to carefully designed multiple choice questions. Personalized comment letters to the students are printed by the computer.

The authors describe

- *the system as the student meets it (multiple choice questions, the answer blank form, the comment letters).*
- *the specific job to be done at the teaching institution when designing a course for CADE.*
- *an evaluation of the system (the students appear to "love" the computer-assisted distance teaching!)*
- *the reason why Hermods decided to develop the system.*
- *the economic feasibility of the CADE system.*

Have you ever applied for a correspondence course? Have you ever felt what it is like to be a correspondence student?

Let us assume that you have, in fact, applied for a correspondence course, that you have received the course material, that you have started your study full of expectations. You soon find that all questions are of the multiple choice type. To show your answers you fill in small boxes on a blank form for optical reading. After a few days you receive a letter, written out by a computer, with comments on your assignment solutions.

How would you feel about correspondence teaching of that kind?

We do not know. But if you react in the same way as the large majority of our computer-instructed students, then you would certainly approve.

We call our computer-supported instructional system CADE for Computer Assisted Distance Education. The system has been developed at Hermods (Sweden). The final stage was carried out in collaboration with NKS (Norsk Korrespondanseskole) in Oslo (Norway)

At present the system has been tried out in ten courses. We, as well as NKS, are planning to introduce it in a considerable number of other courses.

Varying subject areas are already represented by the CADE courses, e.g., English, psychology, physics, electronics and mathematics. Most of the courses are designed for adults studying on a lower secondary or - in some cases - upper secondary level.

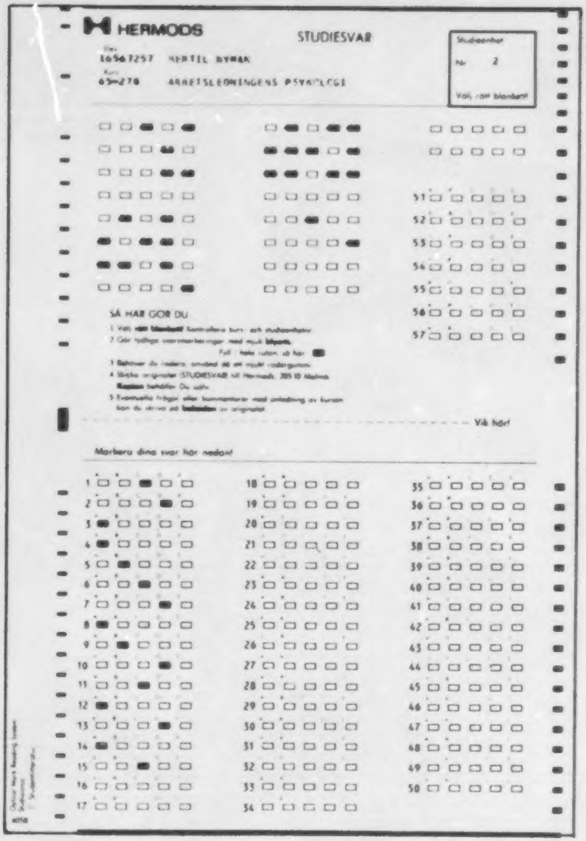
CADE as the students meets it

When the student has worked through his study unit, he finds, as assignments for submission, a number of multiple choice questions. At least a few of them give him a real intellectual challenge.

After the student has decided which answer to choose, he marks an *answer blank form* suited for reading by an optical scanning machine. (See *figure 1!*) Any questions or remarks from the student are written on the back of the answer blank form or on a separate sheet.

After a week or less the student receives a *letter* commenting on his answers. (see *figure 2!*) Each mistake is - of course corrected, discussed and explained. Generally, the students receive different comments to the same question depending on which alternative answer they have chosen. Even correct answers are sometimes commented on.

As a rule, the letter also contains one or a few "specific comments" - e.g., a discussion of the student's answers to a group of questions, maybe with a reference to his answers in an earlier study unit (as in figure 2, Specific comment B).



HERMODS

STUDIESVAR

Studieenhet

Nr 2

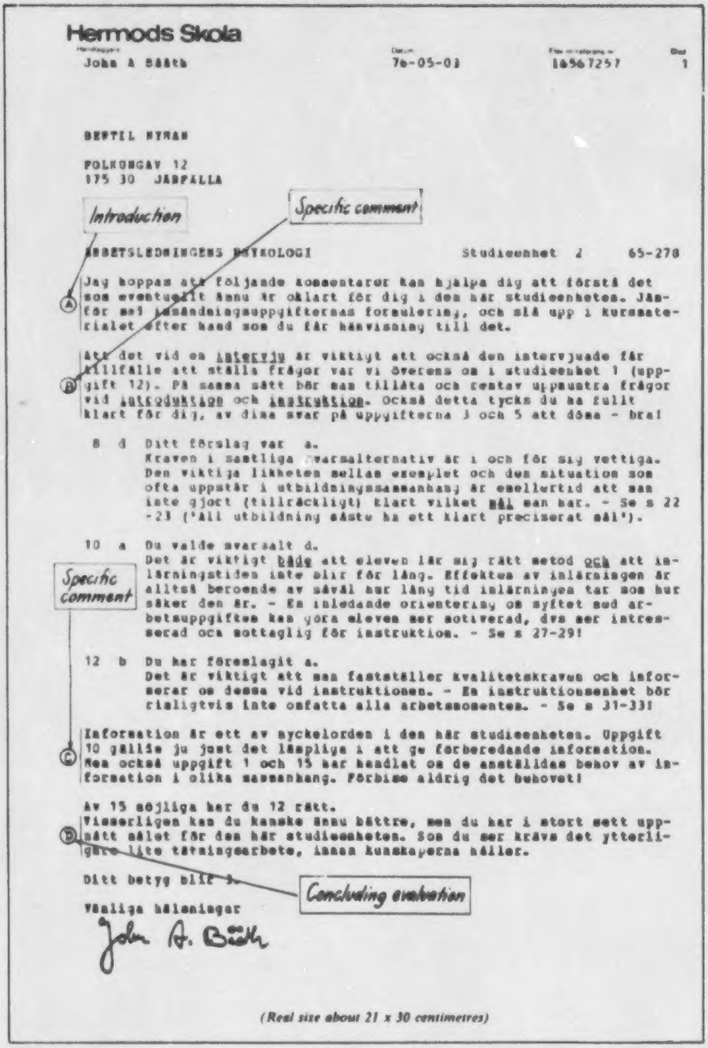
Välj rätt blankett

SÅ HÄR GÖR DU

Vik här!

Markera dina svar här nedan!

Figure 1. A filled-in CADE answer form (real size about 21 x 30 centimetres). The student answer blanks are provided with a computer pre-printed identification as to course, study unit, and student. The boxes for student answers are in the lower part of the blank form.


Introduction
Specific comment
Specific comment
Concluding evaluation
A
B
C
D

Hermods Skola
John A Bååth 76-05-03 16567257 1

BERTIL NYMAN

FOLKUNGAV 12
175 30 JÄRFÄLLA

ARBETSLEDNINGENS PSYKOLOGI Studieenhet 2 65-278

Jag hoppas att följande kommentarer kan hjälpa dig att förstå det som eventuellt ännu är oklart för dig i den här studieenheten. Jämför med inlämningsuppgifternas formulering, och slå upp i kursmaterialet efter hand som du får hänvisning till det.

Att det vid en intervju är viktigt att också den intervjuade får tillfälle att ställa frågor var vi överens om i studieenhet 1 (uppgift 12). På samma sätt bör man tillåta och rentav uppmuntra frågor vid introduktion och instruktion. Också detta tycks du ha fullt klart för dig, av dina svar på uppgifterna 3 och 5 att döma - bra!

8 d Ditt förslag var a.
Kraven i samtliga svarsalternativ är i och för sig vettiga. Den viktiga likheten mellan exemplet och den situation som ofta uppstår i utbildningssammanhang är emellertid att man inte gjort (tillräckligt) klart vilket mål man har. - Se s 22-23 ('All utbildning måste ha ett klart preciserat mål').

10 a Du valde svarsalt d.
Det är viktigt både att eleven lär sig rätt metod och att inlärningstiden inte blir för lång. Effekten av inlärningen är alltså beroende av såväl hur lång tid inlärningen tar som hur säker den är. - En inledande orientering om syftet med arbetsuppgiften kan göra eleven mer motiverad, dvs mer intresserad och mottaglig för instruktion. - Se s 27-29!

12 b Du har föreslagit a.
Det är viktigt att man fastställer kvalitetskraven och informerar om dessa vid instruktionen. - En instruktionsenhet bör rimligtvis inte omfatta alla arbetsmomenten. - Se s 31-33!

Information är ett av nyckelorden i den här studieenheten. Uppgift 10 gällde ju just det lämpliga i att ge förberedande information. Men också uppgift 1 och 15 har handlat om de anställdas behov av information i olika sammanhang. Förbise aldrig det behovet!

Av 15 möjliga har du 12 rätt.
Visserligen kan du kanske ännu bättre, men du har i stort sett uppnått målet för den här studieenheten. Som du ser krävs det ytterligare lite träningsarbete, innan kunskaperna håller.

Ditt betyg blir 3.

Vänliga hälsningar

John A. Bååth

(Real size about 21 x 30 centimetres)

Figure 2. A commentary letter, written out by the computer. The length of the letter may vary from several pages to a few lines.

Each commentary letter in addition gives a concluding evaluation of the student's achievement. The evaluation is varied with respect to the student's results on the previous study unit, (e.g., "Very good - and better than last time", or "You should be able to achieve even better results, but on the whole you have attained the goal of this study unit...")

The concluding evaluation, as well as the commentary letter as a whole, is always kept in a friendly tone: encouraging, supporting, even praising.

How we manage it

There is, of course, much hard work behind CADE and its use in each specific course. Most of the job, however, is done initially - once and for all!

For each specific course, there are three major INITIAL TASKS:

(1) **writing good multiple choice questions,** which correspond to the (explicit or implicit) goals and objectives of the course. Since tests and test-like questions direct the students' study behaviour to a great extent, it is most essential to design the assignments for submission carefully, in order that the students are forced to work at an appropriately high intellectual level.

(2) **preparing comments for the comment letters.** The overall system provides the introductory comments as well as the concluding evaluation comments. (At present, the computer can choose between 9 variations of the introductory comments and between 39 different evaluation comments Consequently, there is no great danger that the same student will receive the same student will receive the same formulations two or more times.) The remaining comments are course-specific - that is, they have to be prepared for each particular course.
Thus, what the tutor has to do is mainly this:
(a) to prepare comments for each possible incorrect student answer to each assignment question. (This would mean a maximum of 480 different comments in a 8-assignments course with 15 questions for each assignment. However, if the comment writer finds it desirable, he may give the same comment to two or more incorrect answers to the same question. On the other hand, he may comment on correct answers too.)
(b) to write "specific comments". The tutor has a considerable freedom to use his imagination when designing the specific comments.

(3) **punching the course-specific comments into punch cards** which are forwarded to the computer

In addition to the initial tasks, there are, of course, a number of ROUTINE TASKS, partly corresponding to the handling of ordinary solutions of student's assignments, partly specific to the system (e.g., running the answer forms through the optical reader).

Finally, there remains the TUTORING TASK of answering students' questions and discussing their remarks.

What the students think about CADE

The system has been developed in three stages, with evaluations after the first two stages (BÅÅTH, 1971, 1973) as well as an overall evaluation after the final stage (BÅÅTH & MÅNSSON, 1977).

During the whole project, the students' attitudes have been markedly favourable. For instance, in the final evaluation, *an overwhelming majority of the try-out students stated that*

- they would prefer multiple choice questions to "ordinary" questions.
- they would prefer typed (= computer-printed) comments to handwritten.
- they felt encouraged by the concluding evaluation comments.
- *they would, on the whole, prefer this type of correspondence tutoring to the traditional one!*

In an experimental part of the investigation we compared students who had obtained explicit information about the CADE system with students who had not been informed that they were tutored by means of a computer. We found no differences between the two groups in terms of attitudes, completions, or grades.

In addition, we observed that the average total turn-round time of the students' assignments (that is, from the time the student sends his assignment until he gets it returned from the school) was less than a week. Practically all students were content with this total turn-round time.

Comparable results have been obtained at NKS when using the same system (BOLSTAD, 1974).

Why we did it

In 1970, the year when the CADE project was initiated, two internal investigations had indicated that there might be some deficiencies in our correspondence education at Hermods, as far as the two-way communication part of the system was concerned.

One of the studies (GRAHM, 1969) had shown that a large (although not quite representative) sample of Hermods students viewed the tutors' corrections and comments as the *least* instructive and, in addition, *least* stimulating part of a correspondence course.

The other study indicated three possible causes of the students'negative attitude to the tutors' work:

(1) the often considerably delayed return of solutions to the students.

(2) the sometimes very time-consuming and, in addition, maybe rather dull assignments of the essay type.

(3) the uneven quality of the tutors' work.

Therefore, we wanted to try out new methods in order to obtain

- higher and more uniform quality in the comments on students solutions, and
- quicker turn round time.

Multiple choice questions seemed to be one possible means of achieving these objectives.

In this situation, the utilization of advanced technical aids was near at hand, since Hermods already used a computer for administrative routine.

PETERS (1971, 1973) has described conventional correspondence education as an industrialized process. As far as this conceptualization is adequate, it appears logical to proceed one step further and automatize those tutor functions which are repetitive and, consequently, can be handed over to a computer.

Of course, the use of multiple choice questions might raise considerable doubt among many correspondence educators. However, a major reason for this common negative attitude appears to be the power of tradition coupled to insufficient experience with well-designed, intellectually challenging multiple choice questions.

(BÅÅTH, 1976; BÅÅTH & MÅNSSON, 1977).

Still, it is evident that multiple choice questions are not well suited for all kinds of learning outcomes. Therefore, *in many courses, a combination of CADE study units with conventional correspondence study units would seem to be the ideal solution.* At NKS in Norway this variant of the system has already been tried out sucessfully.

The economy of the CADE system

Finally, a few words about costs and economy. It should be emphasized that our purpose in developing the system was *not* to decrease costs but to increase the instructional efficiency of our correspondence education. Still, it is highly desirable that costs not be raised.

To express it very briefly, our evaluation indicates that the CADE system is economically justifiable even with a fairly low volume of student solutions. If the system includes courses with thousands of participants a year, tutoring costs may be reduced considerably.

A full discussion of the CADE system is included in our final report (BÅÅTH & MÅNSSON, 1977). (See below)

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Academic support and guidance for individuals in a distance learning system

Dr. David Sewart,
The Open University
(United Kingdom)

The Open University has over 60,000 undergraduate students spread throughout the United Kingdom. They study over 100 different courses. In a home-based learning system, heavily reliant upon correspondence materials and open circuit broadcasting, it is important to establish a relationship between the individual student and the University.

The Open University seeks to establish this relationship through 55 senior counsellors (at 13 regional offices) and some 2,000 tutor-counsellors. Each of the latter are responsible for the academic progress of 30 students from the foundation level until those students finish their studies at the University.

The paper which follows describes the activities of the tutor-counsellors. Dr. Sewart promises to devote the time available to him in India to case studies and to a comparison of The Open University with other distance learning schools and colleges.

In recent years we have seen a rapid expansion of distance teaching and an increase in the complexity of distance teaching systems. In the Open University, one of the largest and most recent entrants to this field, there has been added to the traditional correspondence course communication through open-circuit broadcasting via radio and television and in some areas, by telephone.The Open University system thus serves the specific subject requirements of the mass of its students through centrally produced correspondence materials and broadcasts. It then individualises this service through correspondence contact and telephone instruction by tutors.

Is it enough to serve only specific subject needs in a system of teaching at a distance? In recent years there have been major changes in the conventional teaching system at the college level in the United Kingdom. Increases in size have necessitated a change in the relationship of teacher and student. Formerly there was a close tutor - student link which extended beyond the subject being taught to an everyday personal interest in, and responsibility for, the general education of each member of a small student body. Now there is an ever-increasing gap. If such a gap has arisen in conventional tertiary education, how much more might we expect it to occur in tertiary (college) education at a distance, particularly when this education involves adult students who are studying on a part-time basis.

The nature of the gap was first delineated for the Open University in May 1969 by Director of Studies R.H. Beevers who noted that "adult education experience suggests that at least 50% of a given student's needs are not strictly related to the subject in hand. That is not to say his needs are solely psychological and unconnected with the content of study; the help he needs is of an educational kind, even of an academic kind, but not strictly subject-based."[1] It is upon this perception that the Open University counselling system has developed adapting itself to the perceived needs of mature students in a distance teaching system.

Linked with many tutors

Within the Open University system a student might expect to be linked to a number of different tutors in the course of his studies. In some cases students might have up to four different tutors for a course lasting for one year and forming only one year and forming only one sixth or less of their final degree. Even when a single tutor is responsible for a whole year's course, the relationship between tutor and student in a distance teaching system hardly has time to become established. it was for this reason in particular that the concept of continuity of counselling or continuity of concern was established at an early date. *In addition to his links with specialist tutors, the student was at first linked to a single counsellor* (normally at a local study centre) *and this link was maintained wherever possible throughout the student's academic career.*

The major part of the counselling function was a particular responsibility, peculiar to the Open University, for a number of students as individuals. It is important to note that *at no time was the counsellor regarded as a therapist* capable of responding to those needs of individuals which are normally served by professional groups such as psychologists, social workers, etc. Equally importantly, it would be wrong to see the counsellor as an administrator, acting for the University to enforce its rules and regulations. The fundamental role of the counsellor was educational. His province was a broad one. It included an interest in any and every aspect of a student's relationship, as a student, with the University.

The tutor - counsellor emerges

More recently the basis of this relationship between counsellor and student has been strengthened by combining the role of tutor and counsellor at foundation level - the tutor-counsellor as this combined role is now described. The new student is linked from his foundation course in his first year of study with the University to a single person, normally based in a local study centre. One element of that link is the tutorial function. Thus a bridge is established at once between *tutor-counsellor and student through the subject link.* This relationship is normal to the student in the light of his previous experience with the traditional subject link.

However, the tutor-counsellor plays a far broader role. He is the human resource facility in educational terms for the student learning at a distance. Beyond his role as a tutor he will guide and assist the student with all aspects of his studies in a complex and otherwise highly impersonal system. It is important that this guidance and assistance be given in the context of a knowledge of an individual student's circumstances and educational progress.

Beyond the foundation level

The establishment of this link between tutor-counsellor and student at foundation level is of critical importance thereafter. *Beyond foundation level, as I have stated above, the students will be assigned to a variety of tutors with whom their relationship will be, of necessity, transitory. Yet the link with the tutor-counsellor remains since the counselling function continues beyond foundation level throughout the student's academic career with the University.*

The Open University has laid great stress upon this continuity of concern both in its briefing and training of tutor-counsellors and its back-up services for this function. [2]Clearly tutor-counsellors will need to maintain adequate records of the progress of all their students. To facilitate this activity, they are sent computer print-outs at regular intervals outlining the performance of their students in their written and computer-marked assignments and indicating whether the students have fulfilled certain administrative requirements. They receive copies of the general comments made by other tutors on their students' work. In addition they receive (normally at the beginning of each academic year) an up-dated analysis of their students' academic history, including the courses taken in a given year, courses passed, courses not passed, etc. This computer-produced record is supplemented by the notes each tutor makes on his contacts with individual students.

The maintenance of records is an essential basis for the operation of the counselling function. It is from this that the tutor-counsellor decides whether to adopt a passive or an active role with regard to an individual student.[3] It is on this that he can base his advice to students concerning future course choice, the academic value of taking more than one course in a given year, and the simultaneous responsibilities as an adult to family, work and studies.

Meeting special needs

Clearly the range of problems faced by an adult part-time student in a complex teaching system is vast. A tutor-counsellor with some 30 students is likely to build up considerable experience, but it is unreasonable to expect him to cope adequately with all the problems which are likely to arise. The Senior Counsellors, members of the full-time staff of the University who normally supervise 35 tutor-counsellors each, can provide advice to tutor-counsellors in specific cases and can draw on other resources both within the Open University and outside.

Support to disabled students is a useful example of the specialist problems which can arise. The Open university is often the most suitable and sometimes the only system of tertiary education which is available to disabled students in the United Kingdom. The number of disabled students is very high and each is likely to possess individual learning problems in a system which makes extensive use of printed and broadcast materials, requires attendance at summer school, and considerable manual dexterity in the use of home experiment kits.

In the case of a hearing impaired student, the tutor-counsellor may obviate the study problem completely by arranging for the student to receive transcripts of broadcasts. In most cases, however, it will be necessary for the tutor-counsellor to refer the matter to a Senior Counsellor. This person will arrange for coordinated support services by part of the Open University in liaison with social services and local or national specialist bodies. These specialist services cannot, however, replace the counselling function. *It is the tutor-counsellor with his continued concern and responsibility for the educational well-being of the individual as a student in the Open University system who will be able to judge most effectively the efficacy of the specialist services and suggest a redirection of support if necessary.*

Overcoming disadvantages

Open University students face many problems which are not strictly related to the academic content of the course. As part-time students they invariably have a variety of other commitments. Because of the system of open entry, many students will enter without the traditional qualifications for university study in the United Kingdom. Many are returning to study after several years; they have problems of concentration and memory. Finally, almost all students have had no experience with distance teaching and its high reliance on verbal skills, low level of personal contact, and requirement for disciplined work scheduling.

The counselling function has been designed and is being developed to obviate these disadvantages. It attempts to build a relationship between the student and distance teaching which will provide the individual support, continued personal interest, and educational guidance essential for satisfactory progress.

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1 *The Regional Tutorial System and Its Administration* (memorandum for the Open University planning committee. May 1969. par 7.)

2 See in particular *Teaching for the Open University* (S. Clennell, J. Peters and David Sewart). *The Open University 1977*, and *Handbook for Part-Time Tutorial and Counselling Staff. The Open University 1978*.

3 For a further analysis of this active and passive approach, see post foundation counselling by O. Simpson in *Teaching at a Distance*, Sept.1977.

Student Counselling -- What Works Best?

Louise Singer,
Technical Home Study Schools (U.S.A.)

The author asks, "Who is the counsellor? What are the responsibilities of anyone who gives advice? Should the counsellor assist a student in trouble whether the difficulty stems from physical, mental, social, or emotional causes? Often the trouble is money."

What works best must benefit both the student and the school. The author gives some practical suggestions on coping with counselling problems.

Counselling - the art of giving advice. How does one influence the thoughts of a complete stranger? What will be the outcome? What is the limit beyond which it is inadvisable to advance?

Who IS the counsellor? It can be the director of education, the director of student services, the course teacher, any combination of these, or a special student counsellor who works in co-ordination with them to resolve whatever problem could interfere with the satisfactory completion of the course.. Counselling is response to uncertainty of any kind. Whoever responds to uncertainty is a counsellor.

Changes in our technology have caused the disappearance of many occupations. The single career for life can no longer be taken for granted. However, there are many related jobs for which the worker can be prepared if his/her present job becomes obsolete. It is natural to resist unexpected or undesired change, but a competent adviser can explain practical alternatives and thus lessen or eliminate fear. Goals can be defined by student and counsellor working together; this builds confidence.

Many government and private groups in the United States of America are striving to open all fields of endeavor to all who are interested and capable. Neither race, nor sex, nor creed, nor age -- not even state of health in some cases -denies a qualified applicant access to educational advance. Granted, we have not yet established the Utopia of which we dream; nevertheless, we shall continue to *encourage the qualified to dare!*

Make your advice specific and prompt.

When the assistance of a counsellor is requested, often neither student nor counsellor expects to meet. They may correspond or talk by telephone or by cassette or by electronic computer. Whichever way or ways they "meet", *the answer must be specific.*

Problems on which advice is sought result from some inadequacy felt by a student. Each student knows within himself/herself that responsibility for sucess is personal and individual. But it is human nature to look for a scapegoat for one's shortcomings. Therefore, if a lesson or examination *seems* too difficult, a student contacts teacher or counsellor for assistance.

Small schools which have limited facilities can take as long as several weeks to make a response to a student's request for advice or information. By that time the student may have forgotten the reason for the question, or have become discouraged because of the feeling that the school has no interest. On the other hand, some smaller schools have a policy of answering each question within a specified time. They so inform all students at the beginning of a course.

Larger schools which have computerized their instruction may find that *interdepartmental delays* sometimes cause anguish among students. It is, of course, possible to codify problems in advance along with prepared responses which will fit individual needs. These responses can then be delivered promptly.

Be alert to what the cry for help really means

Be warm, friendly, aware. Write as though both correspondents are talking together.

An angry or otherwise disturbed person can easily become incoherent. A wise, well-prepared counsellor will establish the cause of the disturbance and then find a way to eliminate or overcome it. Keep before you the belief that students make the school. Happy students reflect pleasure with letters of commendation, with suggestions for constructive change, with recommendations to friends and family. Dissatisfied students complain with bitterness to family and friends, to the Better Business Bureau, and even the state Department of Education.

School personnel must respond to students as soon as possible. A friendly, responsive letter -- perhaps on "Jiffy note" paper instead of a formal letter -- can calm ruffled nerves and soothe ragged spirits. If a question requires research and cannot be answered immediately, courtesy demands that your student be thanked for writing and informed that an answer will follow as soon as available. *Then be sure to get that answer and send it!*

Great importance must be attached to the fact that mores and customs differ not only among countries, but also between states, regions, and even local neighborhoods within a city. Family relationships, the status of women, the choice of profession or job -- each makes its own demands upon every student. The counsellor must be alert as possible to *what the cry for help really means. It is the counsellor's responsibility to assist the one in trouble whether that difficulty stems from physical, mental, social, or emotional causes.*

Often money is the problem. Surely it is far wiser to respond to a student by extending credit for a limited time or by granting a "leave of absence" from sending in work projects until the emergency has passed than to allow someone to drop out by default or from embarrassment. Students are more important than money!

A counsellor must be familiar with the aims and subject-matter of each course. Sometimes the counsellor may be asked to restate a passage in the study material in simpler language.

In summary, the counsellor must enjoy dealing with people and their emotions. He/she must take the initiative in establishing a one-to-one relationship which can inspire a student to complete a difficult course, perhaps enroll in another course, and even eventually achieve a career goal.

What works best? The entire counselling program, carefully coordinated and fitted to each individual student.

Will you share a problem with us in India? It will be solved in part at least by roleplaying.

Panel: Research reports and shared insights: What do we know about our students?

Panel leader: Dr. Otto Peters,
Vice Chancellor, Fernuniversität,
(West Germany)

Other panelists: Naomi McIntosh,
Open University (United Kingdom)

Dr. Donald M. Cunningham,
Saint Louis University (U.S.A.)

(Additional persons are expected to join the session.)

Advance papers are not available at this time, but Dr. Peters provided guidelines and suggestions which read substantially as follows.

Guidelines and suggestions for panelists

a) The contributors are invited to prepare a brief paper and provide a *one-page abstract* for pre-circulation.

b) It is very important to select *relevant research findings* about students in distance study systems and present them to the audience.

c) It will be very interesting if you comment upon the relevance of your findings and the *aspects of relevance* important to you: e.g. the improvement of the teaching-learning system; socio-economic conditions of learning, policies of educational development.

d) Describe and reflect on the *methods* you found useful (quantitative and/or qualitative methods) in obtaining your data.

e) Distinguish between findings of *routine research* (permanent institutional research) and *special research projects.* Report on the advantages and disadvantages of the two approaches.

f) The following aspects may become important during the meetings:

--How do students manage *to work for a living and study at a distance* at the same time? What are their interests, needs, expectations?

--How do mature adult students differ from secondary school or college students?

--How do *women students* use distance study to solve specific problems?

--What do *students* do to individualize their learning?

--Do students in distance study recognize the *specific characteristics of their roles* in the learning process?

--Have various societal groups already taken into account students in distance study?

What are the *expectations* of the societal groups?

g) Statistical data as well as typical research instruments (questionnaires etc.) should be enclosed with your brief paper so that they may be easily at hand during the session of the panel.

h) Contribute to a list of *what is essential* in research about students.

Who will read all of this book? We don't know. But you might also ask, "Who reads all of even one of the best newspapers and magazines?" Clearly, in providing a book of advance papers we are giving each delegate an opportunity to read *selectively* both before and after the conference. In striving to make the 1978 book more dynamic, more diversified, and more readable, we are encouraging each delegate to read more than he or she might otherwise do. Perhaps our research survey at the end of the conference will tell us how successful we have been.

Advance papers brief each delegate to *participate fully* in the conference. Each paper is analogous to a lesson in the study material of a correspondence course. It is (we hope) concise, thorough informative, well-planned, representative of the best which the writer can produce. Furthermore, it has been subjected to the critical analysis of one or more colleagues.

In contrast, the "class" or oral presentation at the conference depends a great deal on how ably a competant program participant can perform and how well the audience can respond at a given time and place. By combining the two approaches -- correspondence and class -- we hope to maximize the benefits to all. A speaker who prepares a paper in advance forces himself to give more than the minimum attention required. The delegate who reads the paper in advance is stimulated to say, "I'd like to challenge that point" or perhaps "There's a topic I need to know more about." Discussion and questions from the floor can indeed be lively -- as we have learned from other conferences with advance papers.

In another sense, this book stands alone. Seldom is there as large a collection of papers within the field of correspondence education with such diversified topics and a world viewpoint. If we did not prepare the book as part of the conference, who else would do it and when?

Sometimes we need to tell our story to convince other educators of what we already know. Is the instruction in a self-financed school as competent as that of a university? Can the external studies, adult or continuing education division of a university hold to the high standards typical of the university? Outsiders often answer these questions in the negative. The book should help convince them that the answer is really "yes".

What are we doing in research?

Some trends in the ICCE Research Survey 1976-1977

Erling Ljoså
NKS, (Norway)

In 1976 the ICCE research committee sent out a questionnaire in order to gather brief information on current or planned research projects in distance education. Answers were received, describing 53 projects at 26 institutions. The majority of project descriptions came from universities in the western world.

The most popular research topics were choice of methods and media (14 projects), target groups (14 projects), and two-way communication (7 projects). There are very few comparative studies. The use of the computer is a popular topic for investigation (5 projects).

The survey completed in late 1977, will be followed by a new one: The ICCE Research Priorities Survey. Details of this survey will be given in New Delhi, A questionnaire has already been sent out.

In his report to the 8th ICCE Conference in Paris in 1969 Dr. Gayle B. Childs repeated a statement from Stockholm in 1965, saying:

> "It is probably safe to say that if one were to make a list of the areas of notable achievement in the correspondence study field, research would not head the list."

In 1969, Dr Childs was aware of "a substantial and growing worldwide body of literature relating to correspondence instruction", but research reports were still scarce (Childs, 1969 p. 40).

In the 1970's there have been some indications that the research activities in the field of distance/correspondence education are growing. In 1975, Dr. Börje Holmberg tried, in an article in the ICCE *Newsletter*, to give a review of "what is known about the methods applied within distance study systems, what research has been achieved, and what further studies are desirable", (Holmberg, 1975).[2] This attempt to survey and elucidate the present knowledge of distance education was continued by Dr. Holmberg in his recent book, *Distance Education: a survey and bibliography* (Holmberg, 1977).[3]

The ICCE Research Survey 1976-77[4]

The ICCE research committe decided in 1976 to send a simple questionaire with the ICCE *Newsletter*, asking the readers to supply brief information on current or planned research projects. The purpose of this survey was:

- to gather information on what is being done by way of research and development.
- to disseminate this information to members of ICCE and to researchers in the field in order to stimulate cross-fertilization and exchange of information.

By sending the questionnaire only to the readers of the ICCE *Newsletter* we certainly did not reach all the institutions and individuals that are doing research in this field. The survey is not a complete list of distance/correspondence education research, but the research committee found it useful to gather information on what the membership is doing in research and development. Such information has been the basis for the committee's further work.

Who responded?

In all, 53 research projects were reported. This is a considerable number, but we know that the list is certainly not complete. It must be fair to conclude that research activities are substantially greater than they were a few years ago. Also, even if some of the projects are not completed, the projects that *will* be carried through will add significantly to our knowledge.

The 53 project descriptions were gathered from 26 institutions, and 34 project leaders were involved. Thus, there was a tendency that the same person/institution returned descriptions of more than one project. This indicates that research activities often have a continuous, institutional setting; they are not usually the sporadic efforts of individuals.

The distribution of projects as to types of respondents was as follows:

	Projects
Distance universities and universities with extension departments	31
Private schools	6
Individuals	6
Research institutions	5
Other institutions (governmental etc.)	4

The heavy concentration on universities may be partly explained by the fact that one university, the German Fernuniversität, sent descriptions of 17 projects. On the other hand, this may be a fair picture of the research situation; funds and research staff tend to be allocated in some major institutions at the university level. However, the survey shows that research is being done also by smaller institutions and by individuals.

The geographical distribution was:

Western Europe	32
North America	9
Australia & Oceania	6
Africa	3
Asia	2
South America	1

Here again the Fernuniversität accentuates a skew distribution. It may be that the membership of ICCE is reflected in this distribution almost as much as the actual research activities are. Therefore, it is not reasonable to make any conclusions as to the strength of distance/correspondence education research in different parts of the world.

The topics of research

In the classification of projects we have used a slight adaptation of the classification of Holmberg (1977),[3] adding to his categories one called "national systems and individual schools". By using Holmberg's classification, which is based on a system's approach to distance education, we hope to make it easier to relate the current research projects to what we already know. However, the short descriptions of the survey do not always make it easy to give a definite classification of each project, and therefore we have included some cross-references.

The distribution of projects as to topics was as follows:

	Projects
The rationale of distance education	0
Goals and objectives of study	1
Target groups	14
Contents and structure	0
Organization	3
Choice of methods and media	14
Two-way communication	7
Course creation	4
Evaluation and revision	1
General studies	3
Towards a theory of distance education	2
National systems and individual schools	4

In her key-note address to the 10th ICCE Conference in Brighton (1975), Ms. Renée Erdos described the research which has been done:

> "Early research showed interest in comparative studies of student achievement through distance and resident teaching. Then appeared results of comparative studies of the effectiveness of the different media, or different

> combinations of media, used in distance teaching. More recent studies have sought information about student characteristics, student reactions, and completion rates. Many of these studies, however, have been done on a small scale, and the research techniques and procedures have varied. Therefore their findings have given information about particular institutions working in particular conditions rather than about the total system of distance education and the functions and interaction of its subsystems." (Erdos, 1975, p.12)[5]

With this background one may ask: Are there any notable trends in the ICCE Research Survey 1976-77, as regards topics of research?

From the classification of projects and a careful reading of the project descriptions, one may conclude that the *comparative studies* of distant and resident teaching have disappeared. There is still a great interest in the use of different *methods and media* within distance education. The studies of methods and media, however, are as a rule not comparative studies. They are analytical/evaluative and describe very often developmental projects. This is in accordance with a general feeling that comparative research should not be given high priority. See for instance, Granholm (1971), p.13.

Several methods and media are represented - television, satellites, telephone, audio tapes, face-to-face sessions. It is rather remarkable that as much as 5 projects from 4 different institutions deal with the use of the computer in distance education for educational purposes.

The third item mentioned by Erdos was studies of *target groups*. There are many of them also in the research survey. A criticism of such studies is that they are seeking information on particular problems of particular institutions. Of course, such particular information is often needed by the institution, but it does not add very much to our general knowledge of distance education. Looking at the project descriptions in the survey, one will notice that about half of the target group studies seem to be investigating problems of a more general nature. In these cases, some kind of co-ordination/co-operation might be desirable.

The research survey reveals one more major research area, not mentioned by Erdos. This area is *two-way communication* in distance study; seven projects are described. Three of them deal with tutors, counsellors and support personnel, four projects consider the organization of material and study for the purpose of two-way communication.

The joining of efforts

There are some indications of co-operation between individuals and institutions regarding research and development projects. The kind and extent of cooperation is, however, not revealed throughout this survey. Probably most of the research is being done without any co-operation at all.

Erdos (1975) was dissatisfied with the particularity of distance education research, and made a suggestion to the ICCE:

> "Could not the ICCE now move forward from the analytical reporting of various independent studies to establishing machinery for coordinated research to be carried out by a large number of institutions? These institutions should be able and willing to participate in a programme of research which in addition to information about the participating institutions would yield positive findings for the evaluation of the system of distance education as a method.
>
> "If such a project were undertaken an essential first step would be to identify and agree upon rewarding areas of research, to agree upon priorities, and to agree upon the uniform techniques and procedures to be used in each investigation or experiment."[5]

The ICCE research committee has taken another step in this direction by sending out, together with the report from the *ICCE Research Survey* 1976-77,[4] a new questionnaire as part of *the ICCE Research Priorities Survey*. The research committee imagines that this survey could form the basic material for a number of different activities. We are not yet in a position to say in what ways it should be utilized. One thing is certain, though - the survey will give a very essential indication of the *direction of the interests* of the ICCE membership in research questions. We hope to tell you more about it in New Delhi.

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Erling Ljoså has been working at NKS (the Norwegian Correspondence School) since 1970. He was for some years a course editor, and has since 1975 been responsible for research and development at NKS.

After participating at the 10th ICCE conference in Brighton, England in 1975, Ljoså was appointed editor of the ICCE *Newsletter* and a member of the ICCE research committee.

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How to use the library IMAGINATIVELY in developing a correspondence course

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An interdisciplinary approach can be fun; it also helps students to realize that knowledge doesn't come in watertight compartments with subject labels.

Here the head librarian of a secondary school shows how correspondence course writers can give a course depth by exploring beyond the immediate disciplinary area.

Some of this can be done by being a library "browser." Much more can be done by the systematic use of annotated bibliographies. Two such bibliographies, prepared by Lillian H. Wentworth, are given here to indicate the scope of materials available in even a small library.

An interdisciplinary approach can be fun

A course writer-teacher should be adept in using materials both in and beyond his own field. He can give courses depth by pointing out interdisciplinary relationships such as developments in art, music, science, at a particular point in history. In this way he helps his students realize that knowledge isn't closed into small compartments with subject labels, but is interwoven and complex, and vastly more exciting as part of a textured whole.

This approach can capitalize by appealing to individual interests. For example, popular songs, jokes and cartoons are good indicators of socio-economic conditions at a given time. Their use in a serious course need not mean that the subject matter is taken lightly, or that the course is made easier than it would otherwise be. Humor is actually serious as it reflects the times in which it was written.

The course author who wishes to arouse interest at the start of a lesson, may find an appropriate quotation from *Bartlett's Quotations*, Bergen Evans *Dictionary of Quotations*, the *Oxford Dictionary of Quotations* or any number of collections available in a library. He can be a library "browser." Book reviews in magazines, newspapers, the *Book Review Digest* can lead to a surprise association or a new idea. "Browsing" in reference works of a discipline other than one's own may lead to discovery of a relationship between subjects that is new and challenging.

The two annotated bibliographies which follow suggest the possibilities available to any course writer. Mathematics was chosen for one because we tend to think of it as isolated from other fields, except science. Yet it is related to art, music, philosophy, every day living, fun and games.

The author of a modern history course would surely include the events of World War II. But, should we limit ourselves to the events of the war and its consequences? The annotated World War II bibliography shows that we can view events through news stories, documents, biographies, personal accounts, photojournalism, cartoon humor, music, science, philosophy, geography, economics, drama, and fiction.

SOME FUN BOOKS IN MATHEMATICS

Dantzig *Number: the Language of Science* Macmillan
Written for the non-mathematician, this is a clear presentation of the history, lore, and development of numbers as tools.

Courant & Robinson *What is Mathematics?* Oxford
Readable. Gives an understanding of concepts rather than showing the mechanics.

Kasner & Newman *Mathematics and the Imagination* Simon & Schuster
Leads the non-mathematician into a fabulous mathematical adventure.

Exeter students *We built our own computer* Cambridge
Five students describe with enthusiasm their experiences and learning during the process.

Nikolareff, ed. *Computers and Society* (The Reference Shelf) Wilson
A reprint of articles and speeches on current trends and social issues in the U.S. How the computer affects our everyday lives.

Hogben *Mathematics for the Million* Norton
Written for fun, this book relates mathematics to the development of civilization from pre-history to the present. Includes a section on chess!

Hogben *Mathematics in the Making* Crescent
The development of mathematics to serve the needs of man. Sometimes the human race has taken centuries to understand a concept we now expect our students to grasp in a few minutes.

Huntley *The Divine Proportion* Dover
Application of mathematics to art, philosophy. Includes a section on "the appeal of curves" and chess.

Merrill *Mathematical Excursions* Dover
Fun, recreations, insights into elementary problem solving—"side trips along paths not generally travelled in elementary courses in mathematics."

Vergara *Mathematics in Everyday Things* Harper
Interest can be aroused through curiosity about everyday experience. Why

is the day divided into 24 hours? Are parallel lines parallel? Is the number 13 unlucky? How can shadows be used to measure?

Gardner *Mathematics, Magic and Mystery* Dover
Why do card tricks work? How can you make magic with a common object? What part does geometry play in a vanishing act?

Dudeney *Amusements in Mathematics* Dover
Puzzles of dissection, magic, paradox, chess, showing that most of man's simplest thought processes are mathematically directed for solutions.

Abbott *Flatland* Barnes & Noble
A romance leading from the one-dimensional world to the three dimensional with enticing glimpses of a fourth.

DeGrazia *Math is fun* Emerson
Brain teasing problems and puzzles. Reasoning and ingenuity are required rather than a high level of mathematical attainment.

Emmett *Brain Puzzler's Delight* Emerson
More mind-stretching puzzles; straightforward situations requiring imagination and reasoning to solve.

Pallas *Calculator Puzzles, Tricks and Games* Sterling
Elementary, but fun.

Gardner *Mathematical Puzzles* Crowell
Entertaining puzzles giving glimpses of the unending patterns of mathematics. Include probabilities.

Gardner *The Incredible Dr. Matrix* Scribner's
Dr. Matrix (Martin Gardner's creation) is the world's leading authority on number and language curiosities. (e.g., HAL, the computer in 2001, can become IBM by advancing each letter.) A lot on number theory enhanced by Iva, Dr. Matrix's gorgeous secretary.

Gardner, ed. *Scientific American Mathematical Puzzles and Diversions* Simon & Schuster
Paradoxes, paperfolding, fallacies, brain-teasers—a variety of ancient and new games up to fourth dimensional tick-tack-toe.

Gardner *Mathematical Carnival* Knopf
More games, magic tricks, card tricks, even illegal ways to trisect an angle.

Kordemsky *The Moscow Puzzles* (Gardner, ed.) Scribner's
Ranging from catch riddles to difficult problems; however, not requiring knowledge of advanced mathematics. Clear illustrations, amusing sketches—answers in back of the book. First published in USSR in 1956.

Mosler *Sharpen your wits* Doubleday
A puzzle book for all ages. Observation important to solution.

Steinhaus *Mathematical Snapshots* Oxford
Mathematical phenomena become visible through photographs and diagrams showing the "real world" to the average reader.

Filipiak *Mathematical Puzzles & Other Brain Twisters* Bell
Making and solving mechanical puzzles of all sorts from straight line to complicated geometric design.

Schlossberg & Brackman *The Pocket Calculator Game Book* Morrow
The rule book for new authentic games you can play—even to calculating your diet. Supposedly the one and only such book!

Lindgren *Geometric Dissection* Van Nostrand
Mathematical puzzles depending upon dissection of figures for solution. No profound mathematical knowledge is required. (This is the only known book in any language that deals with dissections puzzles.)

Lockwood *A Book of Curves* Cambridge
On an elementary level; curves are constructed with descriptions of methods for drawing. Aesthetic pleasure in curve design is stressed. Historical notes are added.

TOPIC: World War II.

Related Materials in some other subject areas.

(This list will not include histories of World War II, or national histories which give accounts of the war. Rather, these are extras, in various subject areas and of varying degrees of profundity. Just a sampling is listed in each category, and probably not the best sampling. This list is no doubt slanted to the American view, because that is the background of the compiler. You can compile your list to suit your background. This particular topic was chosen because it is limited to no continent or nation.)

DOCUMENTS, INCLUDING SPEECHES: the "real" thing brings history alive.

Hanscom, J., ed. *Readings in Modern History* Macmillan
Includes writings by Mussolini, Hitler, Hailie Selassie and other war time comments by people in most of the involved countries.

Bailey, T. *The American Spirit* Heath
Contemporary viewpoints on isolation, neutrality, lend-lease. Includes Atlantic Charter, Pearl Harbor controversy, Yalta, etc.

Commager, H. *Documents of American History* Appleton
More actual documents than the above.

Murrow, Edward R. *I Can Hear It Now 1933-1945* Columbia ML 4095

"This recording chronicles the war and the years of crisis, told in the authentic sounds and voices of the men who made history."

Hitler's Inferno in words, in music. Marching songs of Nazi Germany. Audio Rarities 1932-1945. 2445

Roosevelt, Franklin. *F.D.R. Speaks* Washington Records M2243
Authorized edition of speeches. 1933-1945, introduction by Eleanor Roosevelt, edited by Henry Steele Commager.

Churchill, Winston L. S. *His Memoirs and His Speeches* London Records ARL 6426-6438
Includes all the great war time speeches as well as reminiscences.

NEWS ACCOUNTS. "You are there" with the actual news of the times.

New York Times *Front Page History of the World Wars* Arno
Reproductions of front pages through the war years.

Time Capsule *History of the war years, 1939-1945*
A condensation of articles in Times Magazine arranged chronologically under the usual topical headings.

BIOGRAPHIES: this area inexhaustable.

Ayer, F. *Before the Colors Fade: Portrait of a Soldier* George S. Patton, Jr. Berg
A different view of a controversial figure—written by a nephew.

Burns, J. M. *Roosevelt the Soldier of Freedom* Harcourt, Brace
Shows the war leader divided between principles and ideals as against the need to meet pragmatic short-run goals.

Payne, R. *Chiang Kai-shek* Weybright & Talley
A strong leader still has difficulty managing the intricacies of Chinese politics.

Payne, R. *The Life and Death of Adolph Hitler* Praeger
Bringing the many facets of Hitler's personality and life together the author forms a more three-dimensional picture of Hitler.

Taylor, R. L. *Churchill* Doubleday
Of the many excellent biographies of Churchill, this is perhaps the most fun.

Goebbels *The Goebbels Diaries* Doubleday
Ed. by Louis Lochner, the words of Goebbels himself serve only to reinforce his reputation for cruelty.

Mussolini, R. *Mussolini,* an intimate biography Morrow
Mussolini's widow gives behind the scenes glimpses of the dictator, his opinions of the world's great, his homelife and family relations.

Browne, C. *Tojo: the last Banzai* Holt
A product of the Samurai tradition, militarist Tojo, with fierce pride and dedication, led Japan throughout most of the war.

Bialer, ed. *Stalin and his Generals* Pegasus
Soviet military memoirs of the war.

Young, D. *Rommel the Desert Fox* Harper-Row
Although written by a wartime enemy, the adventurous life of this military genius is well portrayed.

DeGaulle, C. *The War Memoirs of Charles DeGaulle* (Eng. tr.) Simon & Schuster
The French leader emphasizes his unshakeable belief in France's destiny, and his difficulties in coping with Allied leaders of differing views.

MacArthur, D. *Reminiscences* McGraw
An account of his whole life, but with interesting sidelights on the war in the Pacific and his relations with Roosevelt.

PERSONAL ACCOUNTS: these too, inexhaustable. Eyewitness with the emotions of being "there."

Payne, R. *Eyewitness* Doubleday
An account of Payne's experiences during the decade 1937-1946, wherein he witnessed many important events both in Europe and Asia.

Brickhill *The Great Escape* Holt
Exciting story of 100 British prisoners who escaped from Stalag Luft III and their harrowing adventures.

Montagu *The Man Who Never Was* Lippincott
Secret operation Mincemeat. A fictitious spy is concocted by British intelligence to mislead the German commanders regarding the Sicily invasion.

Hachiya *Hiroshima Diary* Univ. of North Carolina
The journal of a Japanese physician.

Frank, Anne *The Diary of a Young Girl* Doubleday
The story of a courageous young girl—her growing-up pains hiding with her family from the Germans occupying Holland, and finally her life in concentration camps where she died.

Waksatsuki, J. *Farewell to Manzanar* Bantam
A true story of Japanese American experience during and after the World War II internment.

Butcher, H. *My Three Years with Eisenhower* Simon & Schuster
Gen. Eisenhower's Naval aide kept a diary during the years he worked

closely with Ike—a running, sometimes humorous account—not a biography.

Pyle, E. *Brave Men* Holt
A journalist writes with concern and empathy for the common soldier and shares his hardships.

Wainwright, J. *General Wainwright's Story* Doubleday
The account of four years of humiliating defeat, surrender, and captivity.

Kennedy, L. *Pursuit* Viking
The chase and sinking of the Battleship Bismarck in a thrilling first-hand account.

Calnan, T. *Free as a Running Fox* Dial
Shot down over Germany in 1941, hospitalized, then imprisoned, Tom Calnan escaped many times, by various ruses, always to be returned until his last escape into Allied hands in 1945.

A POTPOURRI IN OTHER SUBJECT AREAS WHICH COULD BE DEVELOPED FURTHER.

ART: *Photojournalism* became a new art form capturing the individual's role in the world drama.

Life's Picture History of World War II includes only military aspects of the war with no attempt to philosophise.

American Heritage Picture History of World War II includes paintings as well as photographs and covers "in words and pictures the essential history of the greatest of human tragedies" and what it meant to the people who lived it.

One of the greatest of the photojournalists was Margaret Bourke-White:

Bourke-White, Margaret *Shooting the Russian War* Simon & Schuster
Sharing the hardships of the Russian people as they fought the war.

Bourke-White, Margaret *They Called It "Purple Heart Valley"* Simon & Schuster
The bombardment of Cassino, Italy, and the destruction of the ancient monastery.

Bourke-White, Margaret *"Dear Fatherland, Rest Quietly"* Simon & Schuster
She travelled amid the ruins of the Third Reich.

The cartoon, poignant, wry, pointing to happenings laughable, yet sad:

Mauldin, B. *The Brass Ring* Norton
Still considered the best of all war cartoonists, Mauldin with irreverent satire depicted the lowly privates Willie and Joe in a Pullitzer Prize winning series for *Stars and Stripes.*

United Notions, more pictures from *Punch* Collins
Cartoons for the year 1942 show British life coping with everyday problems of food, fuel, dress, transport, etc.

Breger, D. *Private Breger in Britain* Pilot
The American copes with the British.

MUSIC: It was the era of Swing, and of movie musicals.

The Swing Era: How it was to be young then. (1940-41) Time-Life Records

Goodman, Benny *The Kingdom of Swing* Stackpole

Gitler *Jazz Masters of the 40's* Macmillan
Performers on piano, saxophone, trombone, bass and drum—you meet them all.

MUSIC (cont.) More serious and more dramatic:

Britten, Benj. *War Requiem:* London Symphony Orchestra & the Melos Ensemble, Bach Choir, Highgate Boys Choir, conducted by Benjamin Britten London FFrr OSA 1255
First performed at the consecration of the rebuilt cathedral at Coventry. Alternates traditional words of the mass for the dead with poems on ugliness and horror of war.

SCIENCE

Ley, W. *Rockets, Missiles, and Men in Space* Viking
Readable, lucid history of rocketry.

Von Braun, W. *History of Rocketry and Space Travel* Crowell
More extensive—by the leader of them all.

Seagrave, G. *Burma Surgeon* Norton
Saving lives under war time conditions.

Clarke, R. *The Silent Weapons* McKay
The realities of chemical and biological warfare.

Segre, E. *Enrico Fermi, Physicist* Univ. of Chicago
The story of the "Father of the Atom Bomb," who became appalled by the monster he had helped to create.

Feinberg, J. *The Story of Atomic Theory and Atomic Energy* Dover
Readable. The implications of the atom in the history of the human race graphically presented for the ordinary layman.

Alfven, H. *Atom, Man, and the Universe* Freeman
"The long chain of complications from atoms to biological development of man to occupy a unique position." One step leads to another—will man

develop a computer more sophisticated than himself?

Barnett, L. *The Universe and Dr. Einstein* Sloane
Easy to understand explanation of Dr. Einstein's quantum theory and theory of relativity which led to the atom bomb.

Whitrow, G., ed. *Einstein, the man and his achievement* Dover
A short account based on radio programs originating in Israel. Divided into "Early Years," "The Years of Fame," and "Last Years."

PHILOSOPHY: The cruelties of war turned many away from belief in the ultimate destiny of man guaranteed by the infinite, to a belief that man was thrown into the world and abandoned to make his choices in the immediate world which was unstable and full of risks. His chances are limited. Pain is a reality.

Sartre, J. *Being and Nothingness* Barnes
A carefuly worked out social and political philosophy basic to understanding of his existentialism.

Cumming, R., ed. *The Philosophy of Jean-Paul Sartre* Modern Library
Brings together Sartre's basic ideas in a logical order, still covering a wide variety of subjects.

Camus, A. *The Rebel* Knopf
Describes bad effects from politicians' misuse of philosophic theories. Emphasizes need for a political philosophy aimed at bettering mankind.

GEOGRAPHY: Use of historical maps will clarify not only campaigns, but show geographically why some nations seek to expand, why some "have" and some don't.

Palmer, R. R., ed. *Atlas of World History* Rand McNally
Not a large section on World War II, but clearly done.

Vries, D. *An Atlas of World History* Nelson
Includes pictures. Good battlefield maps, but number in particular war limited because of time scope.

Gilbert, M. *Recent History Atlas* Macmillan
Covers 1870 to the present day. Gives information on battles on each continent. Good time chart.

ECONOMICS: (Probably the most fruitful coverage here comes from considering results of war.)

Kimball *The Most Unsordid Act: Lend-lease* Johns Hopkins
Explains the Act of 1941 which helped sustain the Allies before the U.S. entered the war.

Price, H. *The Marshall Plan and its Meaning* Cornell Univ.
The plan which gave U.S. economic and technical assistance to 16 European countries to restore productivity after the war.

Keynes, J. M. - *Essays in Persuasion* Norton
Keynesian economic theories were basic to the carrying out of the Lend-Lease agreement and to the Bretton Woods conference which created the International Monetary Fund and the International Bank for Reconstruction and Development.

DRAMA: Choices to cover any part of the world, and any aspect of the war.

Miller, A. *Incident at Vichy* Viking
Jewish suspects are detained at Vichy (1942). A Gentile, feeling an overwhelming guilt, takes the place of one of the Jews.

Johnston, D. *A Fourth for Bridge* (In the *Golden Cuckoo & Other Plays*) Cape
"Based on an actual incident in World War II, men from opposing sides of the war spend time together amicably."

Rodgers, R. *South Pacific* Random
A romantic musical play (with Hammerstein and Logan writing the lyrics) based on Michener's *Tales of the South Pacific.*

Sartre J-P *The Victors (Morte sans sepulture)* (Sartre: *Three Plays*) Knopf
French underground workers must decide between sacrificing themselves or destroying their work.

Wouk, H. *The Caine Mutiny Court Martial* French
Based on Wouk's novel, a U.S. Navy lieutenant stands trial for taking over command from an incompetent captain during a typhoon.

FICTION: Unlimited choice. Short stories, too, but not included in this listing.

Beach, E. *Run Silent, Run Deep* Holt
Exciting. Submarine activity in the Pacific providing accurate, detailed description combined with a tense, dramatic story.

Helier, J. *Catch-22* Modern Library
Comic and cynical. Shows up "humbug, hypocrisy, and stupidity" of a microcosm of society through the adventures of a zany anti-hero, a bombadier based in Italy.

Gallico, P. *The Snow Goose* Knopf
A beautifully told story of how a lonely man aids in the evacuation of Dunkirk, and the bird becomes a symbol of hope.

Plievier, T. *Stalingrad* (tr. from the German by Winston) Appleton
Told from the German point of view, a "brutal, realistic" description of the horrors of war.

Hersey, J. *The Wall* Knopf
A tragic series of events portrayed with sensitivity and humor centered in a group of friends who face annihilation undismayed.

(**POETRY, FILMS, FILMSTRIPS** are not included in this listing.)

CONCLUSION A course writer will not have time to explore *all* the possibilities for enrichment of a given course. Nor will a student have time to do *all* the assignments. But perhaps a student could be given a choice of byways for discovery. This would add not only to his understanding of the subject, but to the richness of his life as he sees a particular discipline related to *all* life and culture.

The materials listed here are found in a library of 16,000 volumes at a private college-preparatory school of 500 students.

Biographies

Akpofure, Rex E.O. Mr. Akpofure is director of the education division of the Commonwealth Secretariat.

Bååth, A John M.A. studied philosophy, religion (particularly Buddhism), literature, Swedish language, psychology and education. Has been working at Hermods, Malmo, since 1960 as editor, course writer, senior tutor etc. and from 1973 as head of research and development.

Believes in the value of warm, supporting relations between human beings - not the least in education. Has the idea that such relations can be established even in computer-assisted instruction.

"Loves" Mozart"s clarinet quintet, *The Lord of the Rings*, and the Marx brothers.

Is married to Mona, a clever and independent woman, who has kept her maiden name Ahlm. Has with Mona a wonderful adopted daughter, Johanna Nirmala, born in Bangalore, India.

Chickering, Arther W. "Recent research on the life cycle defines "middle age" as age 50. Having reached that half-century mark I still don't know just what I want to do when I grow up.

"First (as an undergraduate) I wanted to be a literary critic. Reading slim French novels and eating bon bons seemed an excellent way to make a living. I especially enjoyed thinking about relationships between literature and social change.

"Teaching might be the next step. I enrolled in the Master of Arts in Teaching program at the Harvard Graduate School of Education to prepare for teaching English. This let me continue reading novels, poems, and plays. But when I did my practice teaching I became very interested in how high school students used literature to obtain insights about their own problems and conditions. I gradually found myself spending more time talking with them about those issues than about style, plot, character development and the like. I began to wonder about something called a school psychologist.

I enrolled in the school psychology doctoral program at Teachers College Columbia, while continuing to teach English, Spanish and French at the high school level. When I finished all but the dissertation, I was employed as a school psychologist at the high school and junior high school level. This work brought me into daily contact with a wide range of teachers, students, and the problems they make for each other.

These experiences led me toward a more general concern for teacher preparation and higher education. So I next moved to a teaching and research position at Goddard College, a small experimental institution. The years from 1959 to 1965 were spent there, evaluating the development and impact of such current fashions as Contract Learning, Programmed Learning, and Experimental Learning.

"After a year as a Visiting Scholar at the American Council on Education, I accepted appointment as Academic Vice President of Empire State College, then only a gleam in the eye of Ernest Boyer, Chancellor of the State University of New York and Nelson Rockefeller, then Governor of New York. The years from 1971 until 1977 were spent creating this new institution, working with the President and other administrators and faculty members.

"In September 1977 I moved to my current position, attracted to it because I had never been involved in graduate education, had never worked in a large comprehensive urban university, had never been associated with a Center for the Study of Higher Education, and had never lived in the southern part of the USA..... *I cannot predict the second half of my life, but I'm looking forward to it!"*

(Dr. Chickering is director, Center for the Study of Higher Education, and distinguished professor of higher education, Memphis State University, Memphis, Tennessee, U.S.A.)

Daniel, John S. Dr. Daniel was born in the United Kingdom. After he was graduated from Oxford University with first class honors, he completed a doctorate at the University of Paris on the metallurgy of uranium. As assistant professor and then associate professor at the University of Montreal's Ecole Polytechnique, he developed an interest in educational technology which led him to a term at the (British) Open University. He then joined the infant Télé-université in Québec City, but, at the beginning of 1978, moved to Athabasca University, Edmonton, Alberta, Canada as vice president, learning services.

In addition to his career as an academic administrator in distance study universities, he continues research in educational technology and communications; over half of his fifty publications are in this area. He evaluated Canada's educational experiments on the Hermes satellite. The Hermes project led to the formation of a Canadian Satellite Users Association of which he is acting chairman.

Dr. Daniel lives in St. Albert, Alberta with his American wife and their three young children. His hobbies have been mostly writing and research, but he hopes his children will soon change that. For a promoter of remote learning, he feels that he spends too much time in airplanes, but "the personal touch is vital in distance education."

Datt, Ruddar Principal Ruddar Datt was graduated from Panjab University in 1952 in economics and then appointed a lecturer in economics. He was invited by the University of Delhi to work as its planning officer in 1971-72. He took over as Principal of the School of Correspondence Courses in June 1973.

He has to his credit several publications in economics, notable among them: *Indian Economy* (in collaboration with Mr. K.P.M. Sundharam) and *Understanding an Economy.* He has also compiled in Hindi a *Dictionary of Technical Terms in Economics* and has translated *Six Lectures on Economic Growth* by Simon Kuznets in Hindi.

Ruddar Datt has contributed research articles on "Institutional Cost and Efficiency of Education in Colleges of the Panjab University", published in *Manpower Journal* in 1972 and "Unit Cost of Education - a case study of Haryana Colleges", published in the *Asian Economic Review,* November 1968. He has written papers on correspondence education for *Prasar,* Journal of the Department of Adult Education, University of Rajasthan and the *Economic Times.*

Erdos, Renee F. Miss Erdos has the following degrees and distinctions: B.A.,Dip ED., F.A.C.E. She is currently a consultant in correspondence education at University College, Swaziland. She was formerly head of the School of External Studies, New South Wales Department of Technical and Further Education, Australia (her native country). At another time she was head of the National Correspondence Institution, Tanzania.

A past president of ICCE, she is the author of two UNESCO publications, "Teaching by Correspondence" (1967) and "Establishing an Institution Teaching by Correspondence" (1975).

Estabrooke, Edward C. His degrees are B.S. Carnegie Institute of Technology: Ed. M. and Ed. D., Pennsylvania State College. But that isn't all! Dr. Estabrooke also completed 28 correspondence courses from the University of Virginia, Pennsylvania State, U.S. Navy, and Armed Forces Institute. He was the officer in charge of teacher training , curriculum, and training aids at Navy Pier, Chicago during much of World War II. Since 1946 to the present he has been affiliated with the American School, currently as Executive Vice President and Educational Director. Active in the National Home Study Council, he served as a member of the council's accrediting commission for nine years and as its chairman for two years.

Felts, Doil F. Trained for the ministry with a B.D. degree (1947), Doil F. Felts was pastor of churches in Oklahoma, Missouri, and California for 12 years. He then joined his two brothers in a shoe business which involved 25 retail and one wholesale outlet.

He returned to education and completed the doctorate in counseling psychology in 1968. A member of his doctoral committee became Dean of Extension at the University of Missouri - Columbia and asked him to become director of the Center for Independent Study through Correspondence. He has been there for 9 years.

Doil has taken an active role in the Division of Independent Study of the National University Extension Association (NUEA); he was chairman of that division in 1976-77. He is currently a member of the NUEA board of directors.

Doil and his wife Adalene live 20 miles from the university in a small community where they own property. She teaches at an elementary school in Columbia. He is a collector - mostly of "junktique." Hunting and fishing are among his hobbies, but most of his time in the summer is spent in vegetable gardening...The Feltses have three children who are married.

Goel, S.C. Dr. Goel obtained his M.A. from Allahabad University in 1950. He started his career as a lecturer in economics in the same year. In 1961 he joined the University Grants Commission where he is currently Deputy Secretary, an administrative position with academic overtones. He is author of the book *Education and Economic Growth in India* and has published various papers on the economics of education, examination reforms, and non-formal education.

His work involves considerable touring to different parts of India, but he enjoys his smoking mixture and playing badminton in the evenings. His wife and two grown-up sons do not particularly like his short stature and poor eyesight.
....God save him from his few admirers! --S.C. Goel.

Guiton, Patrick After leaving school, he completed two years of Army service and eight years as a civil servant before starting college. He was a foundation undergraduate at York University (England) in 1963 and a foundation member of the academic staff at Stirling University (Scotland) in 1967. After working at the Open University, he became the first director of external studies at Murdoch University, Western Australia in 1974. He is married with two daughters, ages seven and four respectively.

Gussow Milton Milton Gussow is senior vice president and director of education for the McGrawHill Center for Continuing Education, Washington, D.C. Holding a BS from the U.S. Naval Academy (1949), BSEE from US Navy Postgraduate School (1956), and an MS from Massachusetts Institute of Technology (1957), he has managed programs in education, research and development, systems engineering, and systems analysis. Prior to joining McGraw-Hill, he was a senior engineer at the Applied Physics Laboratory of the Johns Hopkins University and a professorial lecturer in electronics engineering at George Washington University. He currently is adjunct professor for operations research at the American University, a senior member of IEEE, and a menber of ASEE.

Gussow is also a member of Sigma Xi (honorary research society) and Sigma Gamma Tau (honorary aeronautical society). He served as a member of the District of Columbia commission on postsecondary education, 1974-1976, and presently is chairman of the research and educational standards committee of the National Home Study Council. Gussow is listed in *Who's Who in the Southwest*. A prolific author, he has published over 40 articles and textbooks on engineering, mathematics, management, and education.

Holmberg, Borje A native of Sweden and a graduate of the University of Lund, Dr. Holmberg has been active in correspondence education since 1955. From 1956 to 1966 he was educational director of Hermods Skola (Sweden); from 1966 to 1975, president of Hermods Foundation. From 1975 to the present, he has been professor of the methodology of distance study at the Fernuniversitat in Hagen, West Germany and director of its institute for research in distance study.

His professional activities and publications are numerous. He was vice president of ICCE from 1965 to 1972, then president from 1972 to 1975. From 1965 to 1969, he was vice president of the European Council for Correspondence Education; from 1969 to 1975, vice president and chairman of the research and development committee of the European Home Study Council. Author of many books and papers, Dr. Holmberg has recently published *Distance Education - a survey and bibliography*.

In 1974 Dr. Holmberg was awarded the Swedish Vasa Order and in 1976 the order of the White Rose of Finland.

Borge Holmberg notes that since 1947 he has been "married to Anna de la Motte, herself active in education in a leading position." They have two daughters and two sons, all adult.

Jenkins, Janet Miss Jenkins started work as a research worker and editor for The National Extension College (U.K.) in 1966. Apart from a four year break teaching part-time, she remained as editor until 1975, when she joined the staff of the International Extension College (which had developed from NEC) as a research officer. Since then she has been working on a book on producing distance teaching materials for nonformal education in different cultural situations.

Kempfer, Homer Dr. Kempfer received his master of arts degree from the University of Missouri and his doctorate in education from Teachers College, Columbia Universiy. Currently he is executive director of the Continuing Education Council, an accrediting agency. He also serves as director of the Institute for Independent Study and, from time to time, as as educational consultant and contractor for several organizations.

His other achievements include director of the United States Armed Forces Institute; director of the literacy division and deputy director of the department of adult education of UNESCO, Paris; chief of USAID education bureau serving 10 African countries; adult education advisor and then deputy chief education advisor, USAID mission to India; executive director, National Home Study Council, Washington, D.C.; specialist in adult education, U.S. Office of Education.

Månsson, Nils-Ove engineer, economist and finally B.A. (education, statistics, sociology). Started to work at Hermods as a systems analyst and programmer in 1968, but has gradually changed into a "Jack of many trades" with a particular interest in educational research and development.

Would like to spend much more time and effort on problems that must be dealt with to give the earth a chance to survive.

Was in the early sixties a very devoted and active jazz-musician; nowadays still devoted, but unfortunately passive.

Leads a pleasant life with a brilliant wife, Annika, and two lovely children, Joakim, and Katarina (both the proud owners of two small guinea-pigs).

Milanesi, Susana Buigues de Mrs. Milanesi is head of the education department at Universidad La Salle de Sud-America (ULSA). She is a 1967 graduate of the University of Buenos Aires as a bachelor in educational sciences.

Shortly after her graduation she was invited to join the pedagogy department of the University of Buenos Aires where she specialized in programmed instruction and correspondence education.

Subsequently she was active in the Multinational Center for Adult Education, sponsored by the Orgsanisation for American States (OAS).

She published several articles and texts at Eudeba-The Buenos Aires Univesity Press.

In 1974 she engaged in adult education planning and curriculum organization and then took charge of the education department at the University of Buenos Aires. She resigned from this position to join ULSA's staff.

Mrs. Milanesi is married and has two small children. She shares with her husband, an architect, his interest in artistic manifestations, popular customs and craftsmanship.

Pereira, Elias was educated in India and Ceylon where he gained his London matriculation in 1940. His subsequent education was mainly obtained through distance education; he gained his B.Sc (Econs) Hons. and B. Com. from the University of London as an external student. He later obtained his professional qualifications in certified accountancy and chartered secretaryship and associateship in accountancy from the University of Queensland.

Mr Pereira is the founder and director of the Stamford Group of colleges in Singapore and Malaysia. The distance education division was established in 1950 in response to a long-felt need.

He served on the academic staff of the University of Malaya and lectured for many years in accountancy and commerce in post-secondary institutions in Singapore. He has been chairman of the Chartered Institute of Secretaries, Singapore; member of the council of the Singapore Institute of Management; and vice-president of the Supervisory and Management Training Association of Singapore. He is now a member of the editorial and publications committee of the Singapore Society of Accountants.

Peters, Otto Currently Rector (Vice-Chancellor) of the Fernuniversitat at Hagen in North-Rhine-Westfalia, Federal Republic of Germany. Dr. Peters is also a professor of education specializing in methods of distance study.

Dr. Peters started comparative studies in distance education in 1964. He published two comprehensive reports about distance study systems in 23 countries in 1965 and 1968. In 1973 he published a third book characterizing distance study as an industrialized form of teaching and learning.

In conducting his studies, Dr. Peters traveled widely in England, France, Holland, Denmark, Sweden, Czechoslovakia, Poland, USSR and the USA. At present he is involved in an extensive research project on the living, working, and learning conditions of adult participants in distance study.

Phillips, John F., O.B.E., LL.M., F.C.I.S., chairman of the Council for the Accreditation of Correspondence Colleges (appointed by the Secretary of State for Education and Science), served as secretary and chief executive of the Institute of Chartered Secretaries and Administrators from 1957 to 1976 and since then as its president.

He has long been active in the legal profession and has had many "appointments", including the following: president, Institute of Arbitrators; deputy chairman of the Eggs Authority; chairman of the associated examining board for the General Certificate of Education; chairman designate for the Bar Association for Commerce, Finance, and Industry; governor of Harrow College of Technology and Art. He has published many articles and booklets on land law.

Mr. Phillips is married, has three married children, and three grandchildren.

Powell, Rick Born in Toronto, Canada, Rick Powell received his BA in political science from the University of Waterloo (Canada). Later he received his MA in political science from the same university. Married in 1973, he travelled with his wife for four months in West Africa.

Later he became an educational researcher at the Open University, England. There he advised and co-ordinated numerous small research projects carried out by regional academic staff.

In 1976 he was hired by the Commonwealth Secretariat as an advisor to evaluate distance teaching for the Kingdom of Lesotho at the Lesotho Distance Teaching Centre. His contract expires in July 1979.

Sewart, David Dr. Sewart studied at the University of Leeds (1962-68) where he was awarded the B.A. and Ph.D. degrees. After lecturing in Classics at the University of Hull from 1968 - 72, he joined the Open University as a senior counsellor in the University's northwest region.

In 1976 he was appointed assistant director of studies in regional tutorial services at the University's headquarters in Milton Keynes, England. In this role he is responsible for development of the University's counselling service.

Sharma, Vijay Lakshmi Dr. Sharma is currently lecturer in charge of English and undergraduate courses in arts at the Institute of Correspondence Studies and Continuing Education, University of Rajasthan, Jaipur, India.

She received her master's degree in English literature from Government College, Ajmer (1963). Her doctoral thesis was "Virginia Woolf as Literary Critic: a Revaluation" (1976).

In December 1976 she presented a paper on Virginia Woolf before the Modern Languages Association in New York. The next year her book, *Virginia Woolf as Literary Critic* was published.

She has published articles in such magazines as The Literary Criterion, Indian Journal of English Studies, Rajasthan Univevsity Journal of English Studies, Thought and Indian Writing Today. She presented a paper at the 10th ICCE conference at Brighton, England (1975).

Singer, Louise Mrs. Singer received her Bachelor of Science in Education degree from New York University; she has since completed graduate credits.

President of the Academy of Millinery Design, Louise Singer became director of education at Technical Home Study Schools which had been founded by her husband, Leonard. At THSS she is responsible for course updating, editing, and new course development.

The Boy Scouts of America gave Louise Singer an Explorers' charm and pin; Zonta International granted her a five-week study visit to New Zealand correspondence schools; she has conducted training sessions for ICCE and the National Home Study Council (U.S.A.); she has been active in professional committee work. State and national Parent Teachers Associations made her an honorary life member.

Ask her what she "loves" and she'll say, in this order, "people, travel, organization work, conventions, conferences, reading and music."

The Singers have two daughters. Sondra directs and programs a New York City radio show and is director of Caribbean News System. Betty edits and publishes a newsletter called *Options*.

Singh, Bakhshish A graduate of Punjab University (Simla, India), with the bachelor of science and master of arts (English) degrees, Bakhshish Singh has had more than 29 years' experience in teaching and educational administration. He was, and still is, the first director of correspondence courses at Punjabi University, Patiala, India.

He has taught at Government College, the National Defence Academy of India, and Punjab University evening college, which he founded.

A member of several committees of the University Grants Commission, Professor Singh is also president of the National Council for Correspondence Education (India).

He has organized national conferences on correspondence education, the teaching of history by correspondence, and the use of radio to supplement correspondence courses. He has also contributed in India and abroad at least 15 papers on correspondence education.

While on educational trips he has visited the United States, Canada, England, France, West Germanz, Italy, and Kenya.

He is a vice president of ICCE and host for the 11th ICCE world conference New Delhi, India, 1978.

Smith, Kevin C. As a school teacher in New South Wales, Kevin C. Smith was one of the first group of external students (1955) of the University of New England, Armidale, New South Wales, Australia. Subsequently he joined the department of external studies there, becoming assistant director in 1967 and director of external studies in 1973.

During periods of study leave in 1970 and 1975, he observed correspondence education in the United Kingdom, other parts of Europe, and Africa. Prior to attending the ICCE conference this year, he plans to study off-campus programmes in New Zealand, Fiji, the United States, and West Germany.

In August 1973 he became the first president of the Australian and South Pacific External Studies Association which has as its primary objective the promotion of external studies at the post-secondary level throughout Australia, New Zealand, and the South Pacific.

Kevin is married with three children aged 19, 15, and 11 years respectively. He is a keen golfer, but would like to have the time to become a fanatic one.

Tribe, Carol. She is associate professor, child and family studies department, and director of off-campus programs at Weber State College, Ogden, Utah, U.S.A. Her story follows:

"Catching planes, journeying to new places, meeting new and interesting people provide some of the excitement in my life. My husband laughingly and lovingly calls me 'Margaret Mead' and offers to provide the pleated skirt and tennis shoes as I leave on trips for consulting and visiting the American Indian programs.

"I enjoy being a wife and the mother of two lovely daughters. Peak experiences are often the quiet times I enjoy with my family and our big dog at a cabin in the canyon. My Husband is an avid golfer. I was forced to learn to play so I could have the pleasure of being with him more often.

"However, I am never more at peace with myself than when I am with the natural things of the earth: sitting by a cool stream, watching birds, wandering in a forest or hiking in the mountains. I never feel more alive than when skiing downhill in fresh powder snow."

Urhobo, Emmanuel Now the president of Correspondence College of Management & Technology Ltd. in Nigeria, Dr. Urhobo trained as a journalist before studying in England at Northwestern Polytechnic, London. He then enrolled at Middle Temple, London and qualified as a barrister in 1959. He also enrolled at the University of London where he obtained an external degree in economics.

Back in Nigeria, he practised law from 1960 to 1968, specializing in company and business law. From 1969 to 1971 he directed relief operations for the World Council of Churches on the federal side during the civil war. Between 1972 and 1974, he studied economic development and international relations at the American University, Washington, D.C. and earned his master's and doctor's degrees there.

He is married with one living child, age 12. His hobbies include travel, deep-sea fishing, swimming, reading and writing.

Wedemeyer, Charles A. Professor Wedemeyer has worked for more than forty years as a teacher, administrator, and university professor. He has concentrated on education for persons excluded from or unable to attend conventional schools. He is the author of more than 150 articles, books, and monographs on independent study, systems design of instruction, evaluating instruction, communications media and technology in education, open learning and learning theory. He has been consultant in many countries, and has received numerous awards for his innovations in theory and practice. In the ICCE he has been a vice president and was president from 1969 - 1972. (Much of the ICCE *Newsletter* of December 1974 pertains to Charles A. Wedemeyer, "humanist, educator, scholar, and friend.")

Wentworth, Lillian H. Her first two degrees were in political science—A.B. from Brown University, M.A. from the University of Virginia. Then followed years of teaching and counselling at both the secondary and collegiate levels. Her next degree—M.S. in library science—came from Simmons College. At about that time she became a full-time head librarian at Thayer Academy (Braintree, MA., U.S.A.), her present post.

Wentworth, Robert B. Robert B. Wentworth has degrees in business administration, education, and journalism-advertising. Much of his administrative experience as an Air Force officer came in handy in the postwar years. His career in education spans more than 40 years. A college teacher for ten years, he then became a director of information services for a woman's college (which became coeducational). Since 1962 he has been with the Bureau of Adult Services of the Massachusetts Department of Education, much of this time in charge of a correspondence course program which won a few national awards for its innovations. Presently he has broader administrative responsibilities within the bureau, but keeps in touch with correspondence education. In ICCE, he is the programme committee chairman for this conference.

Guidelines for ICCE Chairmen

Your success as a chairman depends to a large extent upon your individual, personal skills. There are, however, certain guidelines or expectations which can help you to achieve your potential.

What to do before you leave home.

1. Read carefully the paper or papers which pertain to the session at which you will preside. As you read, think of questions *you* would like to ask or comments *you* would like to make. They may come in handy later.
2. Read the biographical notes on the person or persons you are to introduce.
3. Read the guidelines for rapporteurs. The rapporteur is your associate.
4. If you like, select some simple device such as bell, whistle, light, timer etc. which you can bring with you to stop any speaker who does not know when his time is up.

What to do soon after you arrive at the conference site.

1. Get in touch with the program participants for whom you are responsible. (This includes your rapporteur.) In most cases they will be staying at the conference hotel. Frequently they'll be walking around wearing name tags. If you don't know them already, get acquainted. You may be able to get additional biographical data of interest.
2. It there is any doubt about it, find out how to pronounce the names of your program participants. It may be a wise precaution to write down the name the way it sounds to you (Example: name sounds like "Come-TWO-me").
3. Check well in advance at the conference office to see if any special equipment or materials previously requested by the program participants will be available at the proper time and place. (In the case of projection equipment, is an operator provided?)

What to do just before presiding and while presiding

1. Check to see that the microphone, platform arrangements, and seating arrangements are satisfactory. If conditions are unsatisfactory, do *not* negotiate with the hotel staff, but *do* report the matter at once to the conference office.
2. If you have not already done so, request that your program participants share outlines, notes etc. with the rapporteur so that he/she will not have too difficult a time in following events. In this way everyone is more likely to be quoted accurately.
3. Set up a time schedule for your session (like a railway time schedule) and keep to it as much as possible. But don't let the audience be aware of it! Try

to avoid mentioning time; also try to avoid obviously speeding up near the end.

4. Introduce yourself, then introduce the program participants. Do both briefly. The biographical notes at the end of the book of advance papers make it unnecessary to comment at length on the persons being introduced.

5. Put the program participants at ease as you introduce them. *You* are encouraged to use brief, innovative ways of making introductions. (Example: You might introduce the first person, then have that person introduce the next, and so on.)

6. Now that you have launched the session, start watching your time schedule. If necessary, bring a speaker to a halt, firmly but tactfully. You are authorized to use any *non-violent* means to accomplish this end. A whistle, bell, light or other device can be very effective. If you are prepared to use it, you probably will not need to do so.

7. Encourage questions and comments after a speaker has made his/her presentation. Try to bring out different points of view. You may, if you wish throw in the first question. You may have a problem "recognizing" every one who wishes to ask a question or make a comment. If so, why not use some novel way to select the individuals who are given preference. (Example: throw a light ball at the person.)

8. *In general, it is best to have a "question and comment time" after each speaker or at set intervals during a panel discussion.* Otherwise, questions and comments may be directed only to the most provocative, the most popular, or the most recent speaker.

9. In closing, announce that the rapporteur will give an oral report at the end of the day (See programme). Thank everyone for participating.

What to do after the session

1. Keep on being kind to your rapporteur. See if there is anything you can do to help him/her prepare the required oral and written reports

2. Please check after 24 hours to see if your rapporteur has submitted his/her written report to the conference office.

Guidelines for ICCE Rapporteurs

A rapporteur is much more than an office clerk who takes good notes. Your task calls for professional judgement. Your knowledge of correspondence education is important. Your ability to select the more significant highlights will enable you to construct a report which will preserve information and ideas of permanent value.

You no doubt have had plenty of experience in preparing reports.Plan your ICCE report in the way which works best for you, but keep it simple. Use plain English. Your report is not "just for the record". UNESCO has already ordered "The Proceedings" in quantity; other copies will be sold throughout the world.

Your specific duties:

(a) Read the advance paper(s) pertaining to the session at which you will be on duty.

(b) Before the session begins, ask the program participants if they have any notes or outlines which you may use either during the session or just after it.

(c) Take notes your own way. Keep in mind that you will need to use those notes at the end of the afternoon in making your oral report at the brief daily summary session. You will also need to prepare your written report within 24 hours!

Your oral report should be a spontaneous and informal reaction to a session you have recently experienced. In effect, you are saying, "I was there. Look what you have missed by not going. Here is what impressed me most".

Emphasize the highlights. Include one or two direct quotations if you can. Weve conflicting views brought out? Perhaps some of the most significant points were made by delegates "speaking from the floor." In closing, offer to answer questions.

Your written report will be based primarily on your notes, your oral presentation and the audience reaction to it. Be as informal as you like; be as specific as you can.

You may want to check your notes with one or more of the program participants. Often they can help you to clarify a point very quickly.

Don't let your notes grow "cold." It's much easier to work with "warm" notes. For that reason -- and because we want to be sure to get your report -- we ask that you *submit your written report within 24 hours* of the time your meeting ended. The conference office will gladly receive handwritten copy, provided we can read your writing!

Some sample reports. Below is a sample report of a meeting which has nothing to do with correspondence education. Perhaps the total report is a little too brief, but it has several excellent qualities. It is informal and friendly; it is very specific on the main points. In one instance the speaker's remarks are summarized in outline form; the remarks of the other speaker are given in paragraph form. (Some of each is probably a good idea, but paragraphs are better than just the outline alone.) An unusual meeting technique (the throwing of the ball) is described; the rapporteur also reacts to the technique. All this is good!

"Approximately 70 people attending the session heard Rosella Bannister talk about her 5 point check system for evaluating consumer education materials. The guidelines are as follows:

1) Is the information accurate, timely, and up-to-date?
2) Is the information practical and relating to real life problems?
3) Is the information balanced and objective?
4) Does it stimulate further study, inquiry and critical thinking?
5) Is it suitable for the intended audience?

"Ms Bannister invited persons to write to her office to obtain information on how to design a consumer education filing system.

"Elsie Fetterman, currently working with the Office of Consumers' Education, shared some of the resources Home Extension Service in Connecticut has developed for consumer education and information. One resource was a series of films produced by students which relate to consumer topics such as the Fair Credit Reporting Act. She reminded the audience to ask for help from Home Extension Services in the local area. "People" resources as well as paper resources are available. Keeping in touch with this service is not only profitable in terms of the material provided, but it may prevent duplication of effort by other organizations.

"In order to stimulate people in a question and answer period, Ms Fernstrom used an interesting and effective technique of throwing a ball to a participant. The person catching the ball could ask a question or talk about a project. In most cases, the participants acted as their own resources. The technique was very effective in "breaking the ice."

Quoted material from the Proceedings of the Second Annual Consumer Education "Catch-up" Conference, November 11-12, 1976, Washington, D.C. U.S. Department of Health, Education, and Welfare (May 1977)